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ESTABLISHMENT OF AN
ENVIRONMENTAL PROTECTION OFFICE,
DEPARTMENT OF PUBLIC HEALTH

February, 1987

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INTERDEPARTMENTAL TASK FORCE ON THE
ENVIRONMENTAL PROTECTION OFFICE

Department	Representative	Title
Buildings and Inspections	Mr. Bob Bonner	Deputy Commissioner
City Property	Mr. Neil Milne	Director, Property Operations Division
Fire	Mr. Rem Gaede	Director, Fire Planning and Operations Research Division
Housing	Mr. Ray Gaizutis	Housing Project Manager
Management Services	Ms. Lorraine Sutton	Management Consultant
Metropolitan Toronto Works	Mr. Robert Ferguson	Deputy Commissioner
Parks and Recreation	Mr. John Jung	Parks Planning Coordinator
Planning and Development	Mr. Arthur Sissons	Program Manager, Zoning and Official Plan
Public Health	Dr. Kate Davies (Chair)	Acting Coordinator, Environmental Protection Office
Public Health	Ms. Marcia Moss	Executive Assistant to the Medical Officer of Health
Public Health	Mr. Fred Ruf	Manager, Environmental Health and Inspection Services
Public Works	Mr. Karl Hemmerich	Supervisor, Environmental Engineering Branch

Board of Health

February 10, 1987

SUMMARY OF RECOMMENDATIONS:

1. That the organizational design and the establishment of the Environmental Protection Office in the Department of Public Health be approved.
2. That the position descriptions for new positions be approved as described in Exhibit 1, and be advertised in accordance with the Civic Employee Promotion Policy and Guideline Procedures and the Collective Agreement,
3. That the establishment changes and preliminary wage rates as presented in Exhibit 2 be approved.
4. That the personnel appointment and reassignments as described in Exhibit 3 be approved.
5. That funds in the amount of \$250,000 for the Environmental Protection Office be included in the 1987 Estimates, Department of Public Health.

EXECUTIVE SUMMARY

Since its reorganization in 1982, the Department of Public Health and other City departments have been required to respond to an increasingly heavy workload of environmental protection matters. (For the purposes of this report, 'environmental protection' has been taken to mean the protection of human health, as mediated by environmental factors.) The situation requires a thorough review to determine not only how the City should respond to environmental protection needs, but also the appropriate personnel resources necessary.

The increased environmental protection workload being experienced by City staff in general, and by Department of Public Health staff in particular, is the result of a high level of concern about the environmental determinants of human health. This can be seen in the increased percentage of environmental matters considered by the Board of Health and City Council between 1980 and 1985. In 1980, 16% of the items considered by the Board of Health were environmental, and by 1985, this had risen to 26%. In the last four years, Department of Public Health staff have also worked extensively with other City departments on several joint projects, participated in federal and provincial environmental committees and responded to numerous requests for information from the general public.

This increased workload necessitated a thorough review to determine how the City should respond to environmental protection needs and the appropriate personnel resource requirements. This

was done by an Interdepartmental Task Force on the Environmental Protection Office that identified the environmental protection needs of City departments and the City at large, and subsequently developed a strategy for an Environmental Protection Office. The environmental protection needs of City departments were determined by reviewing all environmental programs administered by the City of Toronto and identifying new and unmet needs. The needs of the City at large were ascertained by undertaking a consultation process with concerned individuals, groups and agencies. These internal and external needs assessments were then used to develop a strategy for an Environmental Protection Office.

The planning process for the proposed Environmental Protection Office also included a thorough review of the activities of the federal and provincial ministries of health and the environment. This review demonstrates that it is unlikely that the proposed functions of the Environmental Protection Office will duplicate existing activities significantly.

It is recommended that an Environmental Protection Office be established in the Department of Public Health. The principal function of the proposed Environmental Protection Office will be to provide environmental research and investigation services to the Board of Health, City Council, its Standing Committees, City departments administering environmental programs or enforcing legislation and other groups and individuals, including the general public. This will be done by conducting research to identify new environmental protection needs and by responding to identified needs. The proposed areas of responsibility for an Environmental Protection Office include assessing the potential environmental health effects of chemicals used in Toronto, reviewing selected development applications, providing environmental information services and conducting research into substances (alternatives to pesticides and household products) less toxic than those currently in use.

The main features of this reorganization in the Department of Public Health are:

- The deletion of the Community Health Protection Section and the addition of the Environmental Protection Office;
- The deletion of the Community Health Protection Coordinator and the creation of a Program Manager, Environmental Protection Office;
- The reassignment of the four staff positions in the Community Health Protection Section. Three positions will be reassigned to the Environmental Protection Office. One position will be reassigned to the Northern Health Area;

- The addition of nine new staff positions to the establishment of the Department of Public Health;
- The net new cost of the program is estimated at \$475,798 per annum.

1. RATIONALE

There are three reasons why the City of Toronto should establish an Environmental Protection Office.

a) External Factors

Public opinion surveys conducted in the last twenty years have shown that Canadians are extremely concerned about their environment. For example, a recent poll showed that two-thirds of Canadians and 75% of Ontarians think that it is extremely important to eliminate Great Lakes pollution. The long time span associated with many environmental issues suggests that concerns are unlikely to diminish in the future.

In recent years, this long-standing concern has been increasingly related to human health. This linkage has resulted in a much higher level of awareness about the environmental determinants of human health. People are now more worried about the health effects of chemicals in their food, air and drinking water than ever before. They want to know about magnitude and nature of risks to health and what can be done on an individual level to reduce them. They also want action from all levels of government to reduce the levels of chemicals in the environment.

This heightened public awareness has also been recognized by Mayor Eggleton who, in his inaugural address (December 6, 1985), stressed the need for the City of Toronto to give environmental issues a sharper political and administrative focus.

b) Internal Factors

The high level of concern about human health and the environment can also be seen in the increased workload being undertaken by various City departments on environmental protection matters. A significant proportion of this increased workload is being handled by the Department of Public Health.

In the last four years, the Department of Public Health has completed major research studies on Toronto's drinking water, a 'right-to-know' by-law, chemical residues in food, PCB levels in children, health status of residents of the Junction Triangle and lead pollution in Toronto. These projects have established the City of Toronto as a credible and authoritative voice on environmental protection matters. In addition to these projects, staff have worked extensively with other City departments. Joint projects have included the following:

- Keating Channel Environmental Assessment (Planning and Development and Public Works Departments);
- Railway Lands and Precinct "A" (Planning and Development Department);
- Lakefill Quality Assurance Program (Planning and Development Department);
- Massey Ferguson Environmental Agreement (Planning and Development Department);
- Radio frequency on the Toronto Islands (Planning and Development Department);
- Refuse-Fired Steam Plant (Public Works Department);
- Use of Aldrin and Chlordane as termiticides (Buildings and Inspections Department);
- Use of Sevin (Carbaryl) in City Parks (Parks and Recreation Department);
- City Hall air quality study (City Property and Management Services Departments);
- Removal of asbestos in City Hall (City Property Department).

Department of Public Health staff have also responded to requests for numerous reports from the Board of Health. Between 1980 and 1985 this component of the environmental protection workload has increased significantly. For example in 1980, 16% (105/710) of the items before the Board of Health were classified as 'environmental', and by 1985 this had risen to 26% (40/176 to August, 1985). Similarly in 1981, 17% (25/148) of the items from the Medical Officer of Health were classified as 'environmental', and by 1985 this had risen to 27% (28/104 to August, 1985).

Department of Public Health staff have also researched and written many other reports on environmental matters for City Council, Neighbourhoods Committee, City Services Committee and Land Use Committee.

The workload associated with external projects has also increased. Department of Public Health staff have participated in several federal committees including the Environmental Contaminants Act Task Force, and the Inquiry on Federal Water Policy, as well as provincial committees including the Ontario Pesticides Advisory Committee, the Remedial Action Plan for the Toronto Waterfront, and the Drinking Water Planning Committee. Staff also respond to approximately 50 telephone calls and letters per month from the general public.

This ever-increasing workload has been undertaken mainly by the Community Health Protection Section of the Department of Public Health, although the Health Areas were responsible for projects on PCB levels in children, the health status of residents of the Junction Triangle and lead pollution in Toronto. This situation requires a thorough review to determine not only how the City should respond to environmental protection needs, but also the appropriate personnel requirements.

c) Environmental Legislation

The City of Toronto is responsible for many aspects of the physical environment and its relationship to human health. These responsibilities are specified in provincial legislation and municipal by-laws. Exhibit 1 contains a listing of all environmental legislation, by-laws and programs administered by the City of Toronto. In addition, the Medical Officer of Health is required to prevent, eliminate and decrease the effects of health hazards and to keep himself/herself informed in respect of matters related to occupational and environmental health. In many instances, these responsibilities apply to the physical environment. The establishment of an Environmental Protection Office would provide a necessary focus for environmental research and policy development in relation to the City's and the Medical Officer of Health's jurisdictional responsibilities.

2. PLANNING PROCESS

The planning process for the Environmental Protection Office consisted of:

- a) Identification of the environmental protection needs of City departments (internal needs assessment);
- b) Identification of the environmental protection needs of the City at large (external needs assessment);
- c) Development of a strategy for the Environmental Protection Office.

The internal needs assessment was conducted by the Interdepartmental Task Force on the Environmental Protection Office. This involved identifying all existing environmental programs administered by the City of Toronto. These are listed by department in Appendix 1. Following this, new or unmet environmental needs were identified by the Interdepartmental Task Force.

The external needs assessment process was intended to provide concerned individuals, agencies and other organizations with an opportunity to discuss their environmental protection needs. This process examined the opinions of representatives of business and industry, labour unions, academic institutions involved in environmental teaching or research activities, environmental and public interest groups, and appropriate elected and staff officials of the federal and provincial governments. A listing of individuals, groups and agencies that participated in the external needs assessment is shown in Appendix 2.

For the purposes of the planning process, 'environmental protection' was taken to mean the protection of human health, as mediated by environmental factors.

3. A NEW FOCUS FOR ENVIRONMENTAL PROTECTION

The establishment of an Environmental Protection Office in the City of Toronto is the first such municipal initiative in Canada. Historically, municipalities were the first level of government to be concerned with the environment. This concern manifested itself in the design, construction and maintenance of sewers and other systems intended to transport human and industrial wastes away from population centres, and of drinking water supply systems. Subsequently, the focus of attention shifted to resource management and pollution

control. These activities were undertaken mainly by the federal and provincial governments because of the desirability of establishing common national and/or provincial programs and standards. Now, local environmental issues are again becoming prominent. In many cases, local issues can best be handled at a local level, so there is increased pressure for municipalities to take leadership roles in environmental protection issues. The establishment of an Environmental Protection Office is likely to represent the beginning of a trend of municipalities assuming more responsibility for environmental matters within the area of their jurisdictional authority.

The establishment of an Environmental Protection Office will also provide the City of Toronto with an opportunity to explore the feasibility of developing Toronto as a 'centre of environmental excellence'. This would be a long-term project involving other City departments and levels of government, business and industry and academic institutions involved with environmental teaching and research activities. It would also be consistent with Toronto's image as a progressive, environmentally conscious community. Although it is premature to say how this project might develop, it could involve Toronto becoming a leading force in North America in environmental monitoring and clean-up programs, research and public awareness. These types of activities are likely to be given a higher priority in urban communities in North America because of the increased public concerns regarding environmental health.

This new municipal focus for environmental protection should also be seen as an opportunity to implement new ideas and re-affirm valuable existing principles. One of these is the adoption of an 'ecosystem approach' to environmental protection. This approach will require interactions between different components of the environment to be considered, especially the influence of human activities on all living and non-living components. It also provides the opportunity for City departments, and others, to work together cooperatively to examine the practical implications of an 'ecosystem approach' in Toronto. It is hoped that the quality of Toronto's environments will be further enhanced by cooperative efforts between municipal departments themselves, and between municipal and other levels of government.

In summary, the establishment of an Environmental Protection Office by the City of Toronto represents an exciting initiative that will demonstrate the importance the City attaches to a clean and healthy environment. It shows that the City of Toronto is committed to ensuring that the

environment is restored and maintained to the highest degree possible.

4. FUNCTIONS OF THE PROPOSED ENVIRONMENTAL PROTECTION OFFICE

4.1 General Functions

The principal function of the proposed Environmental Protection Office will be to provide environmental research and investigation services to the following client groups:

- a) The Board of Health, City Council and its Standing Committees;
- b) Public Health and other City departments administering environmental programs or enforcing legislation;
- c) Other groups and individuals including the general public, federal and provincial government agencies and environmental groups and advisory committees, such as the City's Industrial Coordinating Committees.

These services will focus on environmental health, i.e., human health as mediated by environmental factors, and on the relationship between human health and chemicals in the physical environment, in particular. The proposed Environmental Protection Office will therefore:

- Conduct research to identify new environmental protection needs;
- Respond to identified environmental protection needs.

It will be important to ensure that an appropriate balance is maintained between these two components. While it is necessary to respond to requests for research and information on identified environmental matters, it will also be important to conduct research to identify any new environmental protection needs.

It would also be possible for the Environmental Protection Office to assume some responsibility for existing environmental programs and enforcement of legislation currently undertaken by other City departments. This option was explored in both the internal and the external needs assessments. City departments administering environmental programs and enforcing legislation were of the opinion that existing programs and legislation are more closely related to the responsibilities of individual departments than they would

be to the proposed Environmental Protection Office. External groups and agencies agreed with this, and indicated that, in general terms, they were satisfied with the way existing programs and enforcement of legislation were being administered by individual departments. It is difficult to see how the present situation could be improved by transferring program and enforcement functions to the proposed Environmental Protection Office from other City departments.

4.2 Areas of Responsibility

The proposed Environmental Protection Office will have four areas of responsibility:

a) Chemical Assessments

The proposed Environmental Protection Office will assess human exposure to, and the potential health effects of, chemicals and other substances in the Toronto environment. This will require the Environmental Protection Office to undertake primary research, including epidemiological studies and analyses of environmental and human tissue samples, as well as secondary research studies consisting of critical reviews of published scientific papers, legislation, government reports and policy statements. The Environmental Protection Office will also examine occupational health and the fate and persistence of chemicals and other substances in the Toronto environment. It is anticipated that the majority of the Environmental Protection Office's workload will be on chemical assessments.

This proposed area of responsibility will examine the relationships between human health and chemicals in the environment. This combination of health and the environment represents a unique attempt to examine the interrelationships occurring in the human ecosystem. At present, health and the environment are managed by two separate provincial agencies, and although the Ministry of Health does undertake a limited number of epidemiological studies, the Ministry of the Environment's programs are almost entirely focussed on the physical environment. A review of programs conducted by the federal and provincial ministries of environment and health was undertaken as part of the planning process for the Environmental Protection Office. This review is shown in Appendix 3.

b) Review of Selected Development Applications

In the earlier report (February 21, 1986) to Executive Committee on the establishment of an Environmental Protection Office, one of the areas of responsibility mentioned is the inclusion of 'environmental assessment' in the City's land use development process. This option was explored in both the internal and external needs assessments. Although City departments, including the Department of Planning and Development, and the external groups consulted recognize that there is a need to ensure that the potential environmental health effects associated with development applications are considered in the approvals process, neither were of the opinion that a municipal 'environmental assessment' process equivalent to the provincial process should be developed. It was agreed, however, that the Department of Public Health should review the potential environmental health effects associated with development applications and that the staff of the Environmental Protection Office would be suitably qualified. The role of the Environmental Protection Office in reviewing selected development applications is discussed in Appendix 4.

c) Environmental Information Services

Another area of responsibility for the Environmental Protection Office mentioned in the foregoing report (February 21, 1986) is the promotion of public awareness and discussion of environmental protection issues. At present the public is often ill-informed about environmental matters and relies on sensational media stories for information. This is because it is difficult to access accurate, readily understandable information on specific environmental problems. What is needed now is an easily accessible source of information that is scientifically accurate, comprehensible to the general public and as objective as possible.

To address this need, the proposed Environmental Protection Office will develop environmental information materials for the public and other groups. This is likely to involve initiating joint projects with other City and Metro departments such as the Department of Parks and Recreation (pesticides used in City parks) and Metropolitan Toronto Works Department (Toronto's drinking water). The Environmental Protection Office will also act as a clearing house for individuals or groups seeking information and/or advice on environmental protection matters. To avoid duplication, this function will be undertaken in close cooperation with agencies already providing environmental information services. It will also be important to work closely with the Department of

Public Health's four Health Areas which are already responsible for the majority of community liaison work undertaken by the Department. The role of the Environmental Protection Office in environmental information services is discussed in Appendix 5.

d) Research into Substances Less Toxic than those Currently in Use

The proposed Environmental Protection Office will investigate the use of substances that are less potentially toxic than chemicals currently in use. This will include alternatives to commonly-used pesticides as well as alternatives to chemicals used in the home. The Environmental Protection Office will also communicate this information to the public through the development of appropriate educational materials. This subject is currently not being examined by any other level of government (municipal, provincial or federal) and the limited amount of work that has been done, has been conducted on a piecemeal basis by environmental and consumer groups.

5. ORGANIZATIONAL DESIGN

5.1 Background Information

When the Department of Public Health was reorganized in 1982 four Central Resource sections were created. One of these sections, Community Health Protection, provided research and program consulting services in environmental health protection. Research services were provided through the Medical Officer of Health to the Board of Health, City Council, its Standing Committees and other City departments, and program services were provided directly to Environmental Health and Inspection Services in the Department of Public Health. Since reorganization, the demand for research services has increased dramatically and there is still an ongoing need for program services. It is therefore appropriate to establish a clearer focus for environmental research and policy development in a new and reorganized Environmental Protection Office, while still recognizing the ongoing needs of the Department's Environmental Health and Inspection Services for program consultation services.

5.2 Proposed Organizational Design

The proposed organizational design for the Environmental Protection Office has been based on the areas of

responsibility described in section 4.2. The following positions will be required:

Program Manager, Environmental Protection Office

The Program Manager will be responsible for managing the research program and staff of the Environmental Protection Office and supervising all policy development. The individual in this position will be responsible for the coordination and facilitation of research and policy development projects with, and for, other City departments. The Program Manager will report to the Medical Officer of Health.

Supervisor of Environmental Health Assessment and Research

The Supervisor of Environmental Health Assessment and Research will supervise research staff and coordinate and conduct the scientific research program of the Environmental Protection Office. This new position is required because of the volume of research work that will be undertaken by the Environmental Protection Office.

Coordinator of Environmental Information and Education

The Coordinator of Environmental Information and Education will supervise staff and coordinate the environmental information program of the Environmental Protection Office. This new position is required because the environmental information program is a new initiative. The existing Community Health Protection Section does not provide information services on environmental matters, although the Education Consultant does conduct educational programs in support of Environmental Health and Inspection Services in the four Health Areas. These services are, however, more related to traditional public health concerns such as communicable disease control, than they are to the areas of responsibility proposed for the Environmental Protection Office.

Environmental Epidemiologist

The Environmental Epidemiologist will supervise research staff and coordinate and conduct the epidemiological research program of the Environmental Protection Office. This new position is required because the environmental epidemiology program is a new initiative. The particular expertise of an Environmental Epidemiologist is needed in the Environmental Protection Office, if it is to be successful in examining the relationships between human health and the physical environment.

Research Consultant (2)

The Research Consultants will provide research and consulting services on environmental health matters to the proposed Environmental Protection Office. These positions are unchanged from those currently existing in the Community Health Protection Section because there is an ongoing need for the services provided by these two positions.

Research Assistant (2)

The Research Assistants will assist in providing research services to the proposed Environmental Protection Office. These two new positions are necessary because of the increased volume of research work that will be undertaken by the Environmental Protection Office.

Industrial Hygiene Consultant

The Industrial Hygiene Consultant will provide research and consulting services on industrial hygiene matters to the proposed Environmental Protection Office. This position is unchanged from that currently existing in the Community Health Protection Section because there is an ongoing need for the services provided by this position. Industrial hygiene and health programs will be coordinated and conducted by the Environmental Protection Office.

Community Environmental Health Officer

The Community Environmental Health Officer will organize community development and promote environmental health issues to a wide range of individuals, communities and organizations. This new position is required because of the increased volume of community development work that will be undertaken. In the Department of Public Health, community development and liaison is undertaken on a decentralized basis by the four Health Areas. This will continue. There is, however, a need for a special focus on environmental health at the community level. Although this position will report to the Coordinator of Environmental Information and Education, most projects will be conducted on an assignment basis, at the request of the Health Areas.

Central Resources Clerk (2)

The Central Resources Clerks will provide general clerical assistance and reception services to the proposed Environmental Protection Office. Their duties require similar skills to the Central Resources clerical positions that currently exist in the Office of the Medical Officer of

Health. In keeping with the organizational design of the Department of Public Health, these two additional support service positions will report to the Support Services Unit in the Office of the Medical Officer of Health.

5.3 Proposed Organizational Changes

To achieve the design proposed above, the following organizational changes are necessary:

- Delete the position of Community Health Protection Coordinator, and add the position of Program Manager, Environmental Protection Office;
- Create positions for Supervisor of Environmental Health Assessment and Research, Coordinator of Environmental Information and Education and Environmental Epidemiologist;
- Reassign the two positions of Research Consultant and the Industrial Hygiene Consultant to the Environmental Protection Office;
- Reassign Education Consultant, currently assigned to the Community Health Protection Section to the Northern Health Area;
- Create positions for a Community Environmental Health Officer, two Research Assistants, and two Central Resources Clerks;
- Continue temporary assignment of a part-time Area Physician to the Environmental Protection Office for one year as an advisor to the Program Manager, Environmental Protection Office.

As indicated above, with the deletion of the Community Health Protection Section, four permanent staff will need to be reassigned. It is recommended that the Research Consultants (2) and the Industrial Hygiene Consultant (1) be reassigned to work in the new Environmental Protection Office. Further that the Education Consultant (1) be reassigned to work in Environmental Health and Inspection Services, Northern Health Area. There is no change in work function or wage code for these positions.

Since April 1, 1984, Mr. Richard Boehnke, the Coordinator of the Community Health Protection Section has been serving as an Acting Environmental Health and Inspection Manager. Mr. Boehnke has served as a member of the Department's senior

management staff, since 1982 and is well qualified to fill the position of Environmental Health and Inspections Manager.

We shall be recommending that Mr. Richard Boehnke be appointed to fill an Environmental Health and Inspections Manager position due to a vacancy created by a retirement in September, 1987.

Personnel appointments and establishment additions and deletions are shown in Exhibits 2 and 3.

The Environmental Protection Office will be one of the four Central Resource Sections in the Department of Public Health and the Program Manager will be a part of the Central Resources Management Team. The organization chart is shown in Exhibit 4.

5.4 Intradepartmental Relationships

Environmental Protection Office staff will work with other Department of Public Health staff, including those from the four Health Areas, on an 'as needs' basis. This will occur when the necessary expertise is not available elsewhere in the Department. Projects are likely to focus on environmental health and on the relationship between chemicals in the physical environment and human health. Requests for consulting services will be made primarily through the Environmental Health and Inspection Services Managers and the Central Resources Coordinators to the Program Manager of the Environmental Protection Office.

5.5 Interdepartmental Relationships

The Interdepartmental Task Force has worked extremely well during the planning process for the Environmental Protection Office. It is therefore proposed that the Task Force continue, in an amended form, to be designated the Environmental Protection Office Advisory Group, for at least the first full year of operation of the Environmental Protection Office. During that period it will undertake the following tasks:

- Act as an information-sharing group not only for the exchange of environmental information between other departments and the Environmental Protection Office and vice versa, but also among other departments;
- Provide policy advice to the Program Manager of the Environmental Protection Office.

- Establish whether or not there is an ongoing need for such an interdepartmental group, after the Environmental Protection Office has been fully operational for one year;

To accomplish these tasks, it is proposed that each City department with environmental programs (Buildings and Inspection, Fire, Housing, Parks and Recreation, Planning and Development, Property, Public Health, Public Works) and the Metro Works Department be invited to appoint an 'environmental protection representative' to participate on the Environmental Protection Office Advisory Group, which would succeed the Interdepartmental Task Force. The Advisory Group will be chaired by the Program Manager of the Environmental Protection Office. It is anticipated that the Advisory Group will meet every two months.

The Environmental Protection Office will also undertake research projects and other assignments as well as respond to inquiries from other City departments (and the Metropolitan Toronto Works Department). Requests for these services will be made to the Medical Officer of Health.

5.6 Physical Location

The offices for the Acting Coordinator and temporary staff have been located in a City-owned building at 12 Shuter Street. Funds have been included in both the 1987 Capital and Operating Budgets to make the necessary property and equipment improvements to provide sufficient space for the new office at 12 Shuter Street.

5.7 Budget

The addition of nine new positions to the establishment of the Department of Public Health will require the injection of new funds into the 1987 Budget. It is estimated that on an annual basis the additional cost of the Environmental Protection Office will be as follows:

Permanent Salaries	\$ 294,731
Fringe Benefits	59,403
Material and Supplies	40,000
Purchase of Services	81,664
	\$ 475,798

During the start-up year of operations (1987), the actual budget requirements will be somewhat below the annualized cost.

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The Department of Public Health is applying to the Metropolitan Toronto District Health Council for partial funding from the Ontario Ministry of Health from its new and/or expanded community health programs fund. If the proposed Environmental Protection Office is established on a permanent basis, staff will also be seeking grants from funding agencies such as the Ontario Pesticides Advisory Committee and the Ontario Ministry of Health's Public Health grants. The Department of Public Health has already established a very good track record for external funding including the Junction Triangle health studies (Ministry of Health), the smoking control program (Health and Welfare Canada) and the study of human exposure to persistent toxic chemicals in the Great Lakes basin (International Joint Commission).

EXHIBIT 1

POSITION DESCRIPTIONS

- 1.1 Program Manager - Environmental Protection Office
- 1.2 Supervisor of Environmental Health Assessment
and Research
- 1.3 Coordinator of Environmental Information and
Education
- 1.4 Environmental Epidemiologist
- 1.5 Community Environmental Health Officer
- 1.6 Research Assistant - Environmental Protection Office

EXHIBIT 1.1

PROGRAM MANAGER - ENVIRONMENTAL PROTECTION OFFICE

WORK ILLUSTRATION

The employee in this position is responsible for management of the research, policy development, and public information programs of the Environmental Protection Office in the Department of Public Health and the direction of the permanent, temporary or contract staff of the Environmental Protection Office.

Directs Environmental Protection Office staff in the development of scientific investigations, policy issues as they affect the physical environment, and environment health protection strategies for the Department of Public Health. Ensures the development, promotion and maintenance of positive public relations and awareness of the Environmental Protection Office's function, through the direction of information and education activities and media contact.

Hires staff, conducts performance evaluations and disciplines. Reviews, plans, implements and evaluates staff assignments in relation to the Environmental Protection Office's goals, priorities, workload, staff skills and experience. Reviews and prepares reports and correspondence, previews and edits displays, publications and pamphlets used to promote the Environmental Protection Office. Participates in the preparation of the Central Resources budget and annual report. Establishes and maintains staff standards and effects procedural changes as required.

Advises and negotiates with provincial and federal government departments concerning planning development, industrial and business proposals which have an impact on the physical environment. Meets with other City department representatives, advises and consults on interdepartmental environmental health projects, procedures and risk assessments.

Prepares reports for the signature of the Medical Officer of Health and assists in the presentation of reports to the Board of Health, City Council and its Standing Committees. Keeps current on scientific, media and community environmental issues. Serves on committees, task forces and department policy workgroups.

Represents the Department of Public Health, by discussing and lecturing on aspects of environmental health, to the media, community associations, academic, professional and industrial groups.

QUALIFICATIONS

Extensive knowledge of and experience in environmental health research and policy development and all levels of government legislation. Ability to prepare reports and direct staff in the areas of scientific investigation, analysis of environmental assessment projects and environmental protection action plans. Credible research credentials and publications. Clear ability to assess and analyze research needs in the City of Toronto and the Department of Public Health. Ability to supervise, direct and coordinate staff and program and maintain positive staff relations. Strong communication and interpersonal skills and excellent public speaking skills. Demonstrated willingness and ability to work in a multi-disciplinary team. Ability to work with senior government and business representatives, and community leaders to stimulate collaborative efforts.

MINIMUM EDUCATIONAL REQUIREMENTS

Post-graduate degree in the physical or life sciences or approved equivalent experience and related work experience in an environmental health related field.

EXHIBIT 1.2

SUPERVISOR OF ENVIRONMENTAL HEALTH ASSESSMENT AND RESEARCH

WORK ILLUSTRATION

The employee in this position will supervise staff in conducting scientific research and prepare policy statements on environmental health needs of the City of Toronto. Reviews and makes recommendations regarding selected classes of development applications which have environmental health concerns.

Supervises and evaluates the research on public health issues for the Environmental Protection Office and compile reports, fact sheets and correspondence as directed. Reviews reports prepared by other Environmental Protection Office staff and provides guidance as necessary. Makes policy recommendations on environmental health issues.

Identifies the need, interprets and analyzes information related to the environmental health impact of selected development applications.

Makes effective recommendations of the hiring and performance evaluation of staff. Directly supervises the Research Consultants and Assistants.

Researches, prepares and updates listings of sites with potentially or known contaminated lands and or structures in the City of Toronto.

Conducts research and prepares reports for signature by the Medical Officer of Health in conjunction with other City departments, establishes a position for reviews and hearings under the provincial and federal Environmental Assessment processes.

Consults and acts as a resource person to staff in the Department of Public Health and other City departments on environmental health assessment and research issues. Supervises activities with external neighbourhood associations and special interest groups and carries out public presentations and responds to enquiries on environmental health issues. Performs administrative duties and directs staff engaged in research and community activities, as required.

QUALIFICATIONS

Proven ability and knowledge of environmental health research and policy development. Knowledge of relevant municipal, provincial and federal legislation on environmental health issues. Current understanding of the municipal land use development process. Demonstrated ability to work in a multi-disciplinary team. Ability to supervise, direct and coordinate staff and maintain positive staff relations. Ability to communicate effectively with other research staff, senior managers in City departments and other levels of government and the public, both orally, and in written form.

MINIMUM EDUCATIONAL REQUIREMENTS

A graduate degree in the physical sciences and related research and work experience in an environmental health related field.

EXHIBIT 1.3

COORDINATOR OF ENVIRONMENTAL INFORMATION AND EDUCATION

WORK ILLUSTRATION

The employee in this position will design, implement and evaluate a comprehensive and integrated public information and awareness program on health issues and the role of the Environmental Protection Office. Supervises staff, including contract personnel, and makes effective recommendations on hiring, discipline and performance evaluations. Liaises with Department of Public Health staff to explain environmental health programs and with environmental health interests in municipalities to exchange information.

Advises the Program Manager, Environmental Protection Office, on the public relations implications of decisions and program changes and indicates ways to improve the public's perception of the Environmental Protection Office, the Department of Public Health and the City. Prepares correspondence and special reports for the Program Manager.

Compiles and maintains reference files on environmental health materials and programs, and acts as a clearing house for individuals or groups seeking information or advice on Environmental Protection Office matters.

Carries out speaking engagements with the community, institutions and business groups and answers public inquiries concerning resource development and environmental activities.

Develops proposals and action plans on publications, networks between groups, and develops educational tools and materials. Identifies public interest and community groups to broaden the audience for existing information and programs. Assists in the development of efficient channels of communication between departments on environmental issues. Maintains contact with representatives of other City departments to keep abreast of current activities and problem areas. Works with professional staff in other City departments to coordinate the provision of information on the activities and achievements of City departments and the Environmental Protection Office.

QUALIFICATIONS

This position requires an experienced professional fully acquainted with all methods and techniques of publicity and promotion. Proven ability to initiate and plan information/education programs. Excellent writing skills and

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awareness of the current communication tools. Proven interpersonal skills and ability to work with Senior Managers and staff, within the Department of Public Health and in other City departments. Ability to supervise, direct and coordinate staff and maintain positive staff relations. Requires an in-depth knowledge of environmental groups and associations in Toronto and Ontario. Demonstrated ability and willingness to work in a multi-disciplinary team.

MINIMUM EDUCATIONAL REQUIREMENTS

University degree in the environmental sciences, public health or communications or approved equivalent of education and experience.

EXHIBIT 1.4

ENVIRONMENTAL EPIDEMIOLOGIST

WORK ILLUSTRATION

The employee in this position will supervise staff, conduct and evaluate epidemiological research on environmental health needs for the City of Toronto.

Plans, designs, develops and monitors health indices to determine patterns of disease in the community. Carries out research and analysis of the factors contributing to ill-health in the community. Assesses information and carries out comparative studies of the health status in the Department of Public Health's Health Areas, relative to other geographic jurisdictions.

Advise the Program Manager, Environmental Protection Office on environmental health programs. Provide the Program Manager of the Environmental Protection Office with analytical reports on the causes, consequences, and possible intervention alternatives for environmental health issues. Make recommendations on the hiring and performance of staff. Directly supervise the research assistant. Act as consultant in planning and evaluating environmental health programs to the Department of Public Health. Critically assesses and evaluates environmental and epidemiological studies from other agencies and institutions.

Prepare reports and factsheets for the Program Manager and assist in the interpretation to the Board of Health, City Council, and Standing Committees. Prepare, implement and analyze surveys on public perception of environmental health issues.

QUALIFICATIONS

Knowledge of, and ability to conduct epidemiological research, interpret results, write position papers and develop programs based on the research. Analytical skills and the ability to conduct secondary research are important in this position. Ability to supervise, direct and coordinate staff and maintain positive staff relations. Strong communication skills, both verbal and written, are required to problem solve and collaborate with staff in the Environmental Protection Office.

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MINIMUM EDUCATIONAL REQUIREMENTS

Graduate education in epidemiology augmented by practical experience in the public health field.

EXHIBIT 1.5

COMMUNITY ENVIRONMENTAL HEALTH OFFICER

WORK ILLUSTRATION

The employee in this position will act as a resource to external environmental groups, to implement a community development process and facilitate the skill development of these groups in identifying, interpreting and taking action on local environmental health issues.

Works with members of the community and Department of Public Health staff to identify the environmental health needs of the community. Participates in community meetings and community organizations, regarding the Environmental Protection Office. Interprets jurisdictional and legislative issues to assist environmental groups in developing expertise in organizational issues. Works with community members and environmental groups to research, plan and implement action on environmental health needs and recommendations. Identifies services and resources needed to promote awareness of environmental health issues. Researches and compiles information in order to identify needs and prepare draft reports and strategies for planning environmental health activities, as directed. Plans, develops and evaluates educational projects to promote awareness of environmental risk factors and prevention issues, in conjunction with Health Area Management Teams and staff. Consults and acts as a resource person to Department of Public Health staff, as well as other civic departments in promoting a community development concept and in providing organization skills. Provides information through the preparation of audio-visual, print and display materials. Develops and evaluates public programs on environmental health, as directed. Develops and maintains lists of community agencies and services, answers inquiries and makes referrals as necessary.

QUALIFICATIONS

Knowledge of the City, provincial and federal environmental legislation and the jurisdiction of various government departments. Knowledge of current environmental health trends and issues. A clear understanding of the political process, and effective intervention strategies. A community organizing background and experience as a facilitator of adult learning. Excellent public speaker who can communicate in both the concrete and the abstract. Ability to coordinate group and community planning and action.

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MINIMUM EDUCATION REQUIREMENTS

A university degree or community college diploma in public health, Social Work or a related discipline. Experience in a municipal setting, and environmental health issues.

EXHIBIT 1.6

RESEARCH ASSISTANT - ENVIRONMENTAL PROTECTION OFFICE

WORK ILLUSTRATION

The employee in this position assists the Supervisor, Environmental Health Assessment and Research, and the Environmental Epidemiologist in gathering scientific research papers and studies, government legislation, policy reports and program information, as well as the work of external groups on environmental health issues. Summarizes this material and analyzes it with direction from senior staff. Reviews documents, assessments and articles and prepares draft reports for discussion, as directed. Also researches sources of information on environmental health concerns, and links the results to the priorities and programs of the Environmental Protection Office.

Updates existing literature on environmental health issues with emphasis on risk factors, successful interventions, prevention options and evaluation methodologies.

Provides assistance compiling and assessing information from sources, such as computer files, site visits, correspondence, legislation, questionnaires and reports, to provide a data base on environmental health issues. Creates computerized data files and maintains and updates them on an ongoing basis. Drafts questionnaires, and conducts surveys, as requested. Analyzes data to establish historical trends, relationships and to make projections. Prepares tables, sketches or graphs and narrative summaries for data.

Provides assistance with research requests by compiling and assessing information from computer and paper files. Performs calculations and organizes data in appropriate format, drafts reports on specific environmental health issues or research areas, as directed.

Attends meetings with City and Department of Public Health staff and representatives from private and public sectors, as requested or required in carrying out the above duties.

QUALIFICATIONS

Proven research skills and knowledge of environmental health issues. Ability to interview clients, summarize information and prepare reports. Good writing skills and interpersonal communication skills. Self-directed and ability to analyze

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problems and make draft recommendations. Use of computer statistical packages an asset.

MINIMUM EDUCATIONAL REQUIREMENTS

University degree or equivalent in the physical sciences or related experience.

EXHIBIT 2

AMENDMENTS TO ESTABLISHMENT
ENVIRONMENTAL HEALTH PROTECTION OFFICE

Position (Occup. Code)	Salary (Wage Grade)	Aff.	Add	Delete	Impact at Maximum Rates
Program Manager (new)	911 (44,908-56,162)	APS	1		\$56,162
Supervisor of Environmental Health Assess- ment and Research (new)	407 (37,545-46,917)	APS	1		46,917
Coordinator of Environmental Information and Education (new)	406 (35,645-44,615)	APS	1		44,615
Environmental Epidemiologist (new)	407 (37,545-46,917)	APS	1		46,917
Community Environmental Health Officer (new)	215 (33,087-37,052)	79	1		37,052
Research Assistant - EPO (new)	213 (30,456-34,439)	79	2		68,878
Central Resources Clerk (12489)	206 (21,358-25,176)	79	2		50,352
Coordinator Health Protection (18502)	911 (44,908-56,162)	APS		1	(56,162)
TOTAL AT MAXIMUM RATES			9	1	\$294,731

EXHIBIT 3

PERSONNEL APPOINTMENTS

<u>NAME</u>	<u>POSITION</u>	<u>SECTION</u>	<u>EFFECTIVE DATE</u>
R. Boehnke (32632)	Environmental Health and Inspection Services Manager	Eastern Health Area	1/10/87

Reassignments

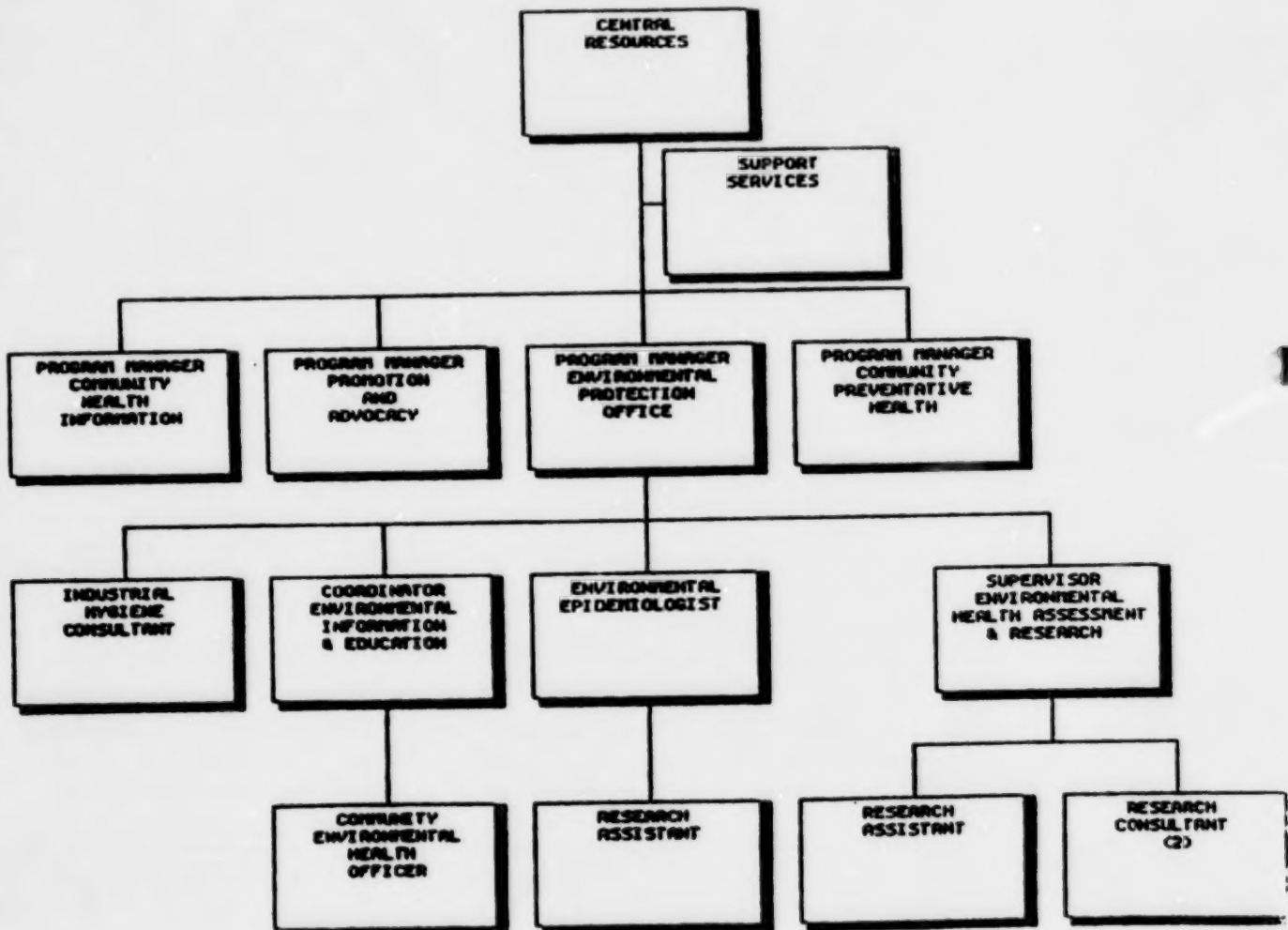
K. Davies (52156)	Research Consultant	Environmental Protection Office	First pay period after approval by City Council
J. Campbell (52155)	Research Consultant	Environmental Protection Office	First pay period after approval by City Council
D. Sharp (44206)	Industrial Hygiene Consultant	Environmental Protection Office	First pay period after approval by City Council
J. Avery (48416)	Education Consultant	Northern Health Area	First pay period after approval by City Council

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DEPARTMENT OF PUBLIC HEALTH
CENTRAL RESOURCES
ENVIRONMENTAL PROTECTION OFFICE

OF ORGANIZATION
AND
CURRENT ESTABLISHMENT



PART II

Introduction

Part II of this report contains the background documentation on the establishment of an Environmental Protection Office. The first appendix was prepared by the Interdepartmental Task Force on the Environmental Protection Office and describes environmental programs administered by the City of Toronto (and the Metropolitan Toronto Works Department). The second appendix lists the individuals, groups and agencies consulted about the proposed Environmental Protection Office. The third appendix outlines the environmental programs of the federal and provincial ministries of health and the environment to assess the degree of duplication with the proposed areas of responsibility for the Environmental Protection Office. The fourth and fifth appendices describe the proposed role of the Environmental Protection Office in reviewing selected development applications and in providing environmental information and education programs.

APPENDIX 1

TABLES SHOWING ENVIRONMENTAL PROGRAMS
ADMINISTERED BY THE CITY OF TORONTO

These tables are intended to show the environmental programs administered by the City of Toronto in the context of the urban ecosystem. They represent a more detailed version of the information presented in the accompanying report. The Metropolitan Toronto Works Department, the Metropolitan Toronto and Region Conservation Authority, the provincial government (mainly Ontario Ministry of the Environment) and the federal government (mainly Environment Canada) have been included for comparative purposes.

Different aspects of the urban ecosystem are shown on different tables (for example, recreation/surface water, drinking water and wastewater), although some cover more than one page. Departments and other agencies are listed down the left hand side of each page and across the top are different actions related to program administration. These range from the least stringent (information exchange) on the left hand side of the page to the most stringent (regulatory function) on the right hand side of the page. Program details have been filled in, as provided by members of the Interdepartmental Task Force on the Environmental Protection Office.

Programs required by by-laws and provincial legislation as well as those that do not involve enforcement are included in these tables. Environmental legislation with which the City complies has not been included.

Abbreviations

- MW - Metropolitan Toronto Works Department
- DPH - Department of Public Health
- DPW - Department of Public Works
- CSO - Combined Sewer Overflow
- SSO - Storm Sewer Outfall
- OMOE - Ontario Ministry of the Environment

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RECREATION/SURFACE WATER

	Literature Information Exchange	Education & Advocacy	Data Collection Investigation & Surveillance	Complaint Response	Regular Inspections	Enforce- ment	Fines	Court Prose- cution	Regulator / Function
Buildings and Inspections									
City Property									
Fire									
Housing									
Metro Works	←-Water Pollution Control Committee	→ Tours of water treatment facilities	→ Bacterial monitoring of lakes and streams Maintenance of watercourses		Unscheduled See data chemical collection releases (see Sewer Use By-law) Drinking water in the distribution system	←-Sewer Use By-law			
Parks and Recreation			Maintenance of watercourses		Received but re- ferred to DPH, DPW or MY				
Public Health	←-General (e.g. Keating Channel Environmental Assessment and Remedial Action Plan)	→	←-Beaches sampling program ←-Public swimming pool sampling program (Health Protection and Promotion Act)						
Public Works	←-Beaches water quality (bacterial)		→ General Maintenance of watercourses						

RECREATION/SURFACE WATER (cont'd)

	Literature Information & Data Exchange	Education & Advocacy	Data Collection Investigation & Surveillance	Complaint Response	Regular Inspections	Enforce- ment	Fines	Court Prose- cution	Regulatory Function
Planning and development	←--General (eg. Keating Channel Environmental Assessment)	→							
provincial government mainly (M.O.E.)	←--General-----→		Toronto nearshore zone		See data collection				Guidelines for Recreational Water Quality Water Quality Objectives
federal government mainly environment Canada)	←--General-----→		Offshore		See data collection				←--Water Resources Act-----→ ←--Fisheries Act-----→
Astro Toronto and Ontario Conservation Authority	←-----		Conservation Authorities Act						→

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DRINKING WATER

Information & Exchange Literature Review Education & Advocacy Data Collection Investigation & Surveillance Complaint Response Regular Inspections Enforcement Fines Court Prosecution Regulatory Function

Buildings and Inspections <-----Plumbing By-law-----> Water Resources Act (plumbing) ----->

City Property

Fire

Housing

Metro Works <---Treatment and main supply----->

<---Water mains (trunk)----->
Chemical and bacterial analysis Bacterial and some chemical see data collection

Water By-law,
Surcharge on Water
Rate By-law
Fluoridation
By-law
Water Works
By-law

Parks and Recreation

Public Health

<---General (e.g. Drinking water report)----->

For complaint response only Bacterial and some chemical

Public Works

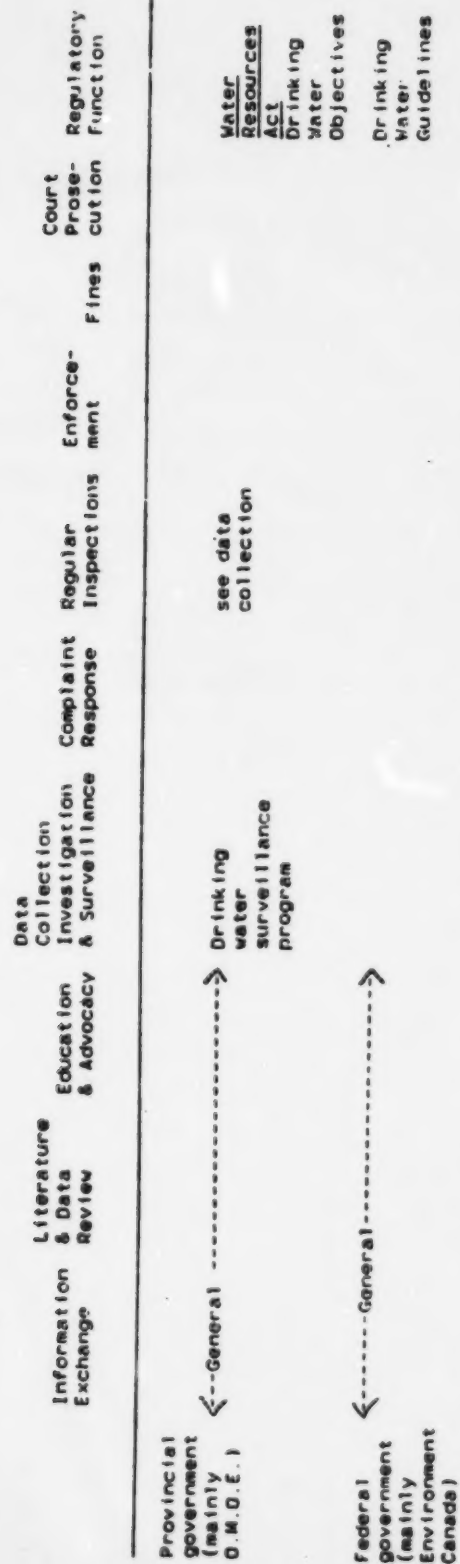
<---Local supply ----->

<---Water mains (local)

<---Water Works and Rates By-law----->

Planning and Development

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DRINKING WATER (cont'd)

	Literature	Data Collection	Court Prosecution
Information Exchange	Education & Advocacy Review	Investigation & Surveillance	Enforcement Fines
		Complaint Response	Regular Inspections
			Regulatory Function

Planning and Development

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WASTEWATER (Storm and Sanitary and Industrial) (cont'd)

Information & Data Exchange	Literature & Data Review	Education & Advocacy	Data Collection Investigation & Surveillance	Complaint Response	Regular Inspections	Enforcement	Fines	Court Prosecution	Regulatory Function
Provincial government (mainly O.M.O.E.)	←--Toronto Area Watershed Strategy Survey	----->				Great Lakes Water Quality Agreement			Model Sewer Use By-law Water Resources Act
Federal government (mainly Environment Canada)	←--Wastewater Technology Centre	----->				Great Lakes Water Quality Agreement			Fisheries Canada Water Act
Metro Toronto and Region Conservation Authority	←----->	----->	----->	----->	----->	----->	----->	----->	----->

Conservation Authorities Act

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SOIL

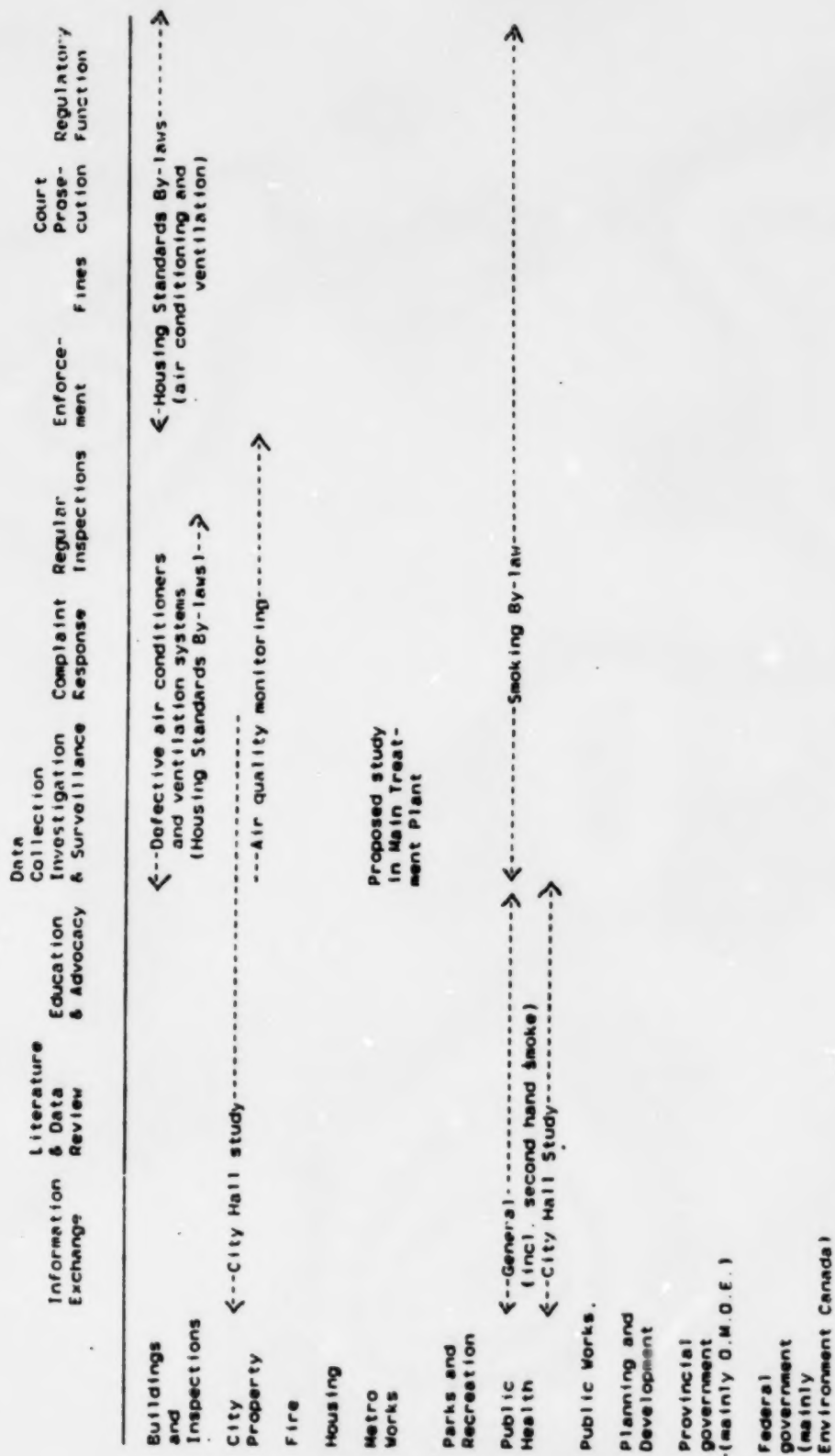
	Literature Information & Data Exchange	Literature & Data Review	Education & Advocacy	Data Collection Investigation & Surveillance	Complaint Response	Regular Inspections	Enforce- ment	Fines	Court Prose- cution	Regulatory Function
Buildings and Inspections										
City Property										
Fire										
Housing										
Metro Works										
Parks and Recreation										
Public Health										
Public Works										
Planning and Development										
Provincial government (mainly O.M.O.E.)										
Federal government (mainly Environment Canada)										

For new Cityhouse
projects←--Parks development--->
and tree planting←--Lakefill Quality Assurance Program--->
←--Studies on lead and PCB concentrations--->Lakefill Quality
Assurance Program←--Lakefill Quality Assurance Program--->
←--Require testing etc. in environmental agreements-->←--Lakefill Quality Assurance Program--->
←--Guidelines for decommissioning--->
of industrial lands

←--Lakefill Quality Assurance Program--->

"Upper
Level of
Contaminants-
guidelines"

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INDOOR AIR QUALITY

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OUTDOOR AIR QUALITY

Information Exchange	Literature & Data Review	Education & Advocacy	Data Collection Investigation & Surveillance	Complaint Response	Regular Inspections	Enforce- ment	Fines	Prose- cution	Regulatory Function
Buildings and Inspections									
City Property									
Fire									
Housing									
Metro Works									
Parks and Recreation									
Public									
Public Works									
Planning and Development									
Provincial government (mainly O.M.D.E.)									
Federal government (mainly Environment Canada)									

<--Atypical odours----->

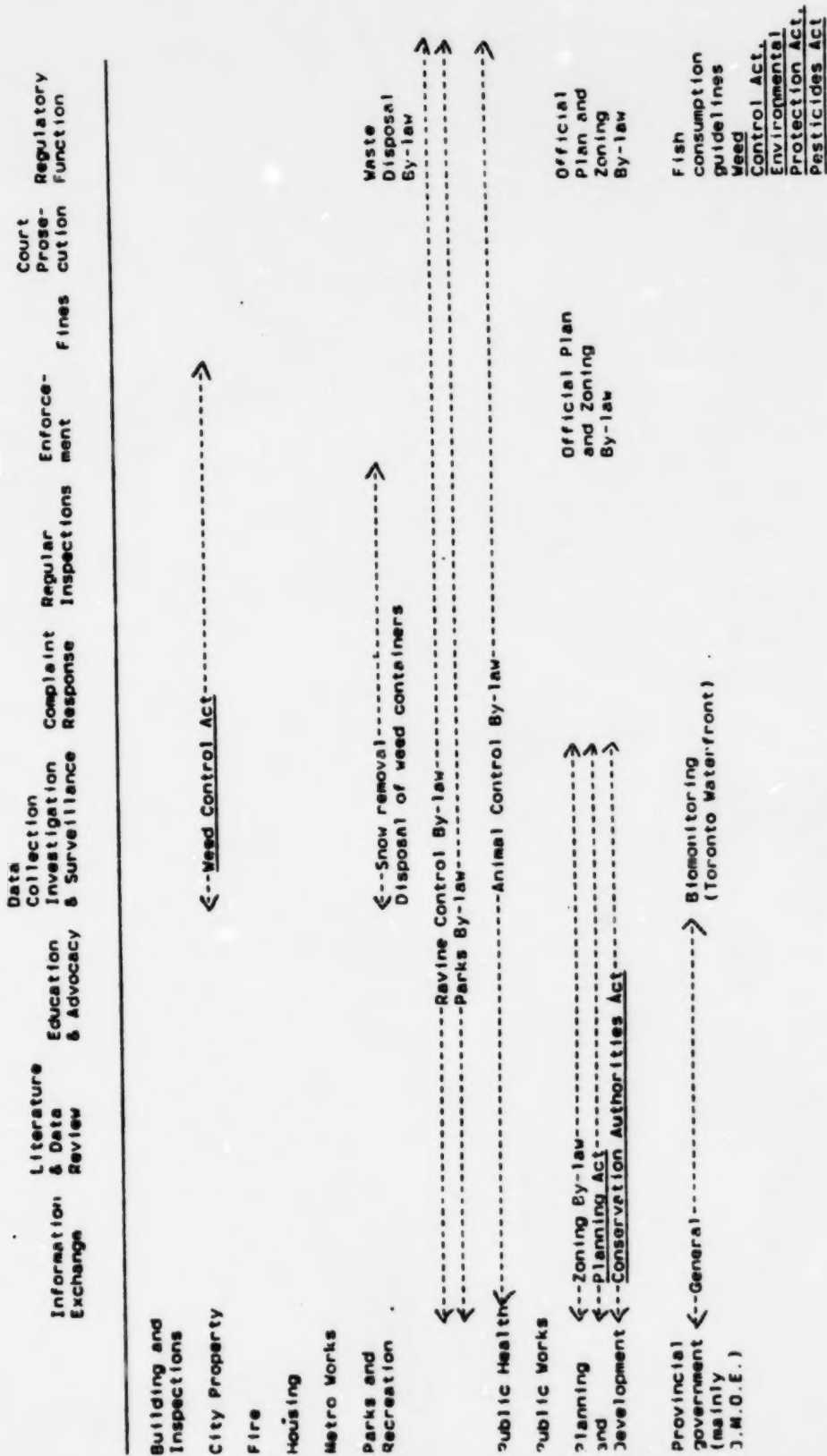
<--General (Health Protection and Promotion Act)----->

<--Atypical odours ---->

<--Research Bulletin ----->

<--Network of Toronto sampling stations ----->
----Junction Triangle etc.-----><--RSO Regulation 308----->
(Environmental Protection Act)

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NATURAL ENVIRONMENT (PLANTS, ANIMALS, PARKS, ETC.)

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NATURAL ENVIRONMENT (PLANTS, ANIMALS, PARKS, ETC.) (cont'd)

Information Exchange	Literature & Data Review	Education & Advocacy	Data Collection Investigation & Surveillance	Complaint Response	Regular Inspections	Enforcement	Fines	Prosecution	Count	Regulatory Function
Federal Government Environment Canada	←--General	----->Biomonitoring Great Lakes								Environmental Contaminants Act
Metro Toronto and Region Conservation Authority	←	-----	-----	General - fill	-----	-----	-----	-----	-----	----->

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BUILT ENVIRONMENT (Streets, Parks, Residential, Non-Residential)

(N.B. Parks are in both the Natural and Built Environment)

Buildings and Inspections	Information Exchange	Literature & Data Review	Education & Advocacy	Data Collection Investigation & Surveillance	Complaint Response	Regular Inspections	Enforce- ment	Fines	Court Prose- cution	Regulatory Function
-----Termites By-law----->										
							<u>Building Code Act</u>	Rooming House By-law, Licensing		
							Zoning By-law	By-law, Plumbing		
							See regulatory function	By-law, Sewer Impost		
								By-law, Unused		
								Refrigerator By-law, Heating		
								By-law, Non- residential		
								Standards By-law, Housing		
								Standards By-law, Debris By-law, Swimming Pool		
								Fence By-law, Vacant Land		
								By-law, Former		
								Toronto Building		
								By-law, Development		
								Control By-law, Permits		
								By-law		

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BUILT ENVIRONMENT (Streets, Parks, Residential, Non-Residential) (cont'd)

	Information Exchange	Literature & Data Review	Education & Advocacy	Data Collection Investigation & Surveillance	Complaint Response	Regular Inspections	Enforce- ment	Fines	Court Prose- cution	Regulatory Function
City Property	←Maintenance of City Property -- Removal of PCB-containing light ballasts > (e.g. Removal of waste from vacant property)									
Fire	←--- Fire prevention ----->									
Housing	←-- Prevention and control of roach infestations ----->									
Metro Works										

Waste
Disposal
By-law.
Garbage
Grinding
Devices
By-law.
Assumption
of Waste
Disposal
Equipment
By-law

See
regulatory
function

Environmental Protection Act
Transportation of Dangerous Goods Act
←-----Termite By-law ----->
(in Cityhome projects)

←-----Construction in flood plain areas-----→
(Conservation Authorities Act)

APPENDIX 2

EXTERNAL NEEDS ASSESSMENT
INDIVIDUALS, GROUPS AND AGENCIES CONSULTED

In July, 1986, 61 letters were sent to representatives of business and industry, labour unions, academic institutions involved in environmental teaching and research activities, environmental and public interest groups and elected and staff officials of the federal and provincial ministries of health and the environment, inviting them to participate in the external consultation process for the Environmental Protection Office. Twenty-six positive responses were received representing a response rate of 41%. Individual meetings were held with all 25 respondents. Their names and affiliations are shown below.

Business and Industry

North West Toronto Industrial Coordinating Committee
West Toronto Industrial Coordinating Committee
South East Area Industrial Coordinating Committee
Environmental Quality Committee, Toronto Board of Trade

Labour Unions

Mr. Jim Turk, United Electrical Workers Union
Mr. Gary Cwitco, Communications Workers of Canada
Ms. Bonnie Heath, Toronto Occupational Health Resource Centre

Academic Institutions

Prof. Pam Stokes, Institute of Environmental Studies, University of Toronto
Mr. Bill Graham, Toronto Board of Education
Dr. Ross Hall, McMaster University

Environmental and Public Interest Groups

Ms. Joanna Kidd, Pollution Probe
Mr. Kirk Roberts, Ontario Environment Network
Ms. Toby Vigod, Canadian Environmental Law Association
Ms. Sarah Miller, Canadian Environmental Law Association
Mr. David Poch, Energy Probe
Mr. Don Huff, Federation of Ontario Naturalists
Ms. Elizabeth Quance, Niagara Neighbourhood Lead Committee
Ms. Joyce McLean, Greenpeace

Federal and Provincial Governments

Ms. Ruth Grier, MPP Etobicoke
Mr. Charles Caccia, MP Davenport
Mr. Jim Kingham, Environment Canada
Mr. John Marsden, Environment Canada
Mr. Ian Orchard, Environment Canada
Dr. Andrew Gilman, Health and Welfare Canada
Mr. David Beach, Ministry of the Environment
Dr. Lesbia Smith, Ministry of Health

Others

Eastern Health Area Community Advisory Board
Downtown Health Area Community Advisory Board
Western Health Area Community Advisory Board

APPENDIX 3

THE PROPOSED ROLE OF THE ENVIRONMENTAL PROTECTION OFFICE (EPO)
COMPARED TO THE FEDERAL AND PROVINCIAL MINISTRIES OF
HEALTH AND THE ENVIRONMENT

SUMMARY

The purpose of this section is to provide a comprehensive review of the activities of the federal and provincial ministries of health and the environment in the Toronto area. These have been compared to the general areas of responsibility proposed for the EPO to demonstrate whether there will be any duplication.

The federal and provincial ministries of health and the environment undertake many programs related to the physical environment including: scientific research; development of standards, guidelines and objectives; monitoring of air, soil and water quality; providing technical expertise; enforcing standards and legislation; reviewing new emissions to the environment; reviewing the storage, transportation, handling and disposal of hazardous materials; and addressing interprovincial and international environmental problems.

After a thorough review of the activities of the federal and provincial ministries of health and the environment, it is evident that it is unlikely that the proposed functions of the EPO will duplicate existing activities significantly. This is because the focus of EPO activities will be human health as mediated by environmental factors but in the federal and provincial governments, environment and health are considered to be separate areas of jurisdictional responsibility. Additional factors include:

- The provincial and federal ministries have jurisdiction over much larger geographical areas than the proposed EPC. They also have much larger mandates;
- No existing primary research studies (e.g., epidemiological studies and chemical analyses) will be duplicated by the proposed EPO. The EPO may undertake primary research only when available data are inadequate;
- The proposed EPO will not be responsible for enforcing any environmental legislation. It will, however, review environmental policy, proposed legislation and standards, objectives and guidelines;

- The proposed EPO will review certain classes of development applications where there could be environmental health concerns. Some of these applications would eventually also be reviewed by the Ontario Ministry of the Environment (OMOE). However, the role of the EPO will be to link the City's development approval process and the OMOE's Certificate of Approval process, and will not duplicate the OMOE's function. The proposed role of the EPO bears no similarity to the provincial Environmental Assessment Process.

Most of Environment Canada's activities in Toronto relate to the Waterfront. In most cases, Environment Canada has an advisory or research role in many projects proposed by federal crown agencies. City departments, including the Department of Public Health, already have defined roles in these projects and would not duplicate any of the work of Environment Canada.

There may be some overlap between the activities of the Ontario Ministry of Health and two of the proposed areas of responsibility of the EPO. This will not be a problem because the Ministry's role is to provide environmental health consultation services to health units when necessary. The establishment of the EPO will mean that it is unlikely that the City of Toronto would request Ministry assistance, enabling them to devote more time and resources to smaller health units.

Most of Health and Welfare Canada's environmental health activities involve setting, enforcing and monitoring compliance with standards, guidelines and objectives or conducting primary toxicological research. The proposed role of the EPO does not include either of these functions, so there will not be any duplication of services.

ACTIVITIES OF THE ONTARIO MINISTRY OF THE ENVIRONMENT

The OMOE undertakes many programs related to the physical environment. The two divisions of the OMOE that are responsible for most environmental programs, apart from Environmental Assessment, are the Environmental Services and Operations Divisions.

Environmental Services Division

The Environmental Services Division conducts research, sets standards, guidelines and objectives, and develops programs intended to protect air and water quality, and to ensure safe waste management practices. The Division is divided into four branches: Air Resources, Water Resources, Waste Management, and Laboratory Services.

The normal activities of the Environmental Services Division can be reduced to a common summary, regardless of whether the matter is related to air quality, water quality or waste management.

(i) Research

The Environmental Services Division conducts research related to air and water quality, including research on point and non-point sources of contaminants. Examples of this include: assessing crop damage from ozone in Southern Ontario; estimates of phosphorus loadings to the Great Lakes; and investigations of the relationship between mercury in fish, water quality and acidic deposition.

(ii) Analyses

The Environmental Services Division develops analytical techniques for the measurement of environmental contaminants. The development and testing of pollution abatement equipment is also conducted by this Division.

(iii) Development of Standards, Guidelines and Objectives

The Environmental Services Division develops environmental standards, guidelines and objectives, including those for: emissions from industries; drinking water quality; sport fish contaminants; land use adjacent to landfills; siting and operation of landfill sites; gas migration; sludge disposal; waste transfer stations; decommissioning of industrial or waste sites; biomedical waste incinerators; and laboratory standards codes.

(iv) Monitoring

The Environmental Services Division maintains air and water quality monitoring systems, including monitoring wastewater loadings to the Great Lakes and pesticide levels in Ontario streams.

(v) Technical Advice

The Environmental Services Division provides technical advice to municipalities and private industry, especially in matters of water supply, sewage treatment and waste management techniques.

The Operations Division

The Operations Division is responsible for the enforcement of legislation, standards and policies, as developed by the

Environmental Services Division. The Division is comprised of the following branches: Investigations and Enforcement; Approvals and Engineering, Project Engineering; the Environmental Assessment Branch; and the Spills Action Centre. In addition, this Division has six regional offices in Ontario. The City of Toronto is located in the OMOE's Central Region.

(i) The Investigations and Enforcement Branch

The Investigations and Enforcement Branch investigates potential violations of the Environmental Protection Act, and where necessary, issues Control Orders, Stop Orders or lays charges related to sewage treatment plant effluents, communal water supplies, industrial point sources of air and water pollution, haulage and disposal of municipal and hazardous wastes.

(ii) Approvals and Engineering Branch

Most of the work of the Approvals and Engineering Branch relates to reviewing and processing Certificates of Approval for water supply facilities, sewage treatment plant effluents, sewage system infrastructure, atmospheric emissions, municipal landfill sites, new or expanded facilities for handling special wastes, sub-surface sewage systems, sewage haulage, and private sector wastewater facilities. Licensing services for pesticide use are also handled by this branch.

(iii) Other Branches

The Project Engineering Branch is responsible for providing engineering and construction assistance to municipalities for water supply and sewage treatment infrastructure. This Division also maintains a Spills Action Centre which receives and responds to reports of spills of oil and other hazardous materials on a 24-hour basis.

(iv) Central Region

The City of Toronto is in the OMOE's Central Region. The responsibilities of Central Region extend to Muskoka in the north, Burlington to the west and the Cobourg area to the east.

Central Region staff monitor the performance of communal water supply and sewage treatment plant facilities and operate numerous such facilities in smaller municipalities. Staff also conduct monitoring of point sources of emissions to air and water and enforce abatement or negotiate program approvals. The performance of municipal and private landfill sites and special waste sites is also monitored by Central

Region staff, in addition to reviewing certain types of applications for Certificates of Approval, licenses and permits for pesticide use, Official Plan Amendments and Zoning By-laws accompanying Official Plan amendments, proposed plans of subdivisions, and waste generator submission reports.

COMPARISON OF ONTARIO MINISTRY OF ENVIRONMENT ACTIVITIES AND PROPOSED ROLE OF THE EPO

Geographical Area

The OMOE has jurisdiction over the whole of the Province of Ontario, whereas the proposed EPO will only have jurisdiction over the City of Toronto.

Environmental Services Division .

(i) Non-Duplication of Primary Research

The problems researched by the proposed EPO will be selected largely on the basis of requests from the Board of Health, City Council, its Standing Committees and other City departments. Where existing data are inadequate, a limited amount of primary research will be undertaken by the EPO, although external funding may be required in some cases.

(ii) Standards, Guidelines and Objectives

The development of environmental standards, guidelines and objectives is undertaken at the provincial level of government for several reasons including:

- Municipally set standards could create regional disparities;
- The OMOE has the legal jurisdiction to set standards under the Environmental Protection Act.

The proposed EPO will work within the framework of provincial standards, guidelines and objectives. The EPO will review proposed standards, guidelines and objectives as they relate to the City of Toronto.

(iii) Technical Advice for Municipalities and Private Industry

The OMOE provides technical advice to municipalities, and private industry, because they often lack independent resources to deal with the operation of communal water supply, sewage treatment and waste disposal facilities. This is a function which will not be duplicated by the EPO.

Operations Division

(i) Investigations and Enforcement

The investigation of discharges exceeding regulations, the issuance of Control Orders and the laying of charges lies primarily within the jurisdiction of the OMOE, under the Environmental Protection Act. The proposed EPO will not be engaged in any of these activities.

(ii) Certificates of Approval for Discharges and the City of Toronto Development Process

When a Certificate of Approval is required, the proponent of a development usually applies for the Certificate only after zoning permission is obtained from the City. But occasionally changes are required by the OMOE for emission abatement and/or dispersion or for waste storage. In some cases the plans approved for the zoning may go back to the City for a further zoning variance, or an amendment to a development agreement.

This situation could be averted by establishing closer links between the municipal and provincial processes. One means would be to circulate all Committee of Adjustment Zoning By-law and Official Plan amendments involving new or expanded industries to the EPO concurrently with the circulation to other City departments. The proposed EPO will review the applications and if Certificates of Approval were required, EPO staff would consult with the OMOE regarding their requirements. Environmental concerns could therefore be addressed prior to zoning approvals.

(iii) Project Engineering and Spills Action

The Operations Division is the branch responding to spills of oil and other hazardous materials. This is logically within provincial jurisdiction since most highways and bodies of water are under provincial management. As well, the Project Engineering Branch provides engineering and construction assistance to municipalities for water supply and sewage treatment infrastructures. None of these activities will be duplicated by the EPO.

(iv) Central Region

Many of the activities of Central Region are intended to service smaller municipalities with limited human and financial resources. This function will not be duplicated by the EPO. Central Region also occasionally undertakes or coordinates specific activities, such as the Toronto Area Watershed Management Strategy. The proposed EPO will work

with Central Region when these activities involve the City of Toronto.

PROVINCIAL ENVIRONMENTAL ASSESSMENT PROCESS

Background

The only projects subject to the provincial Environmental Assessment Process are major undertakings proposed by the province itself or by municipalities, conservation authorities, forestry authorities, colleges, universities and other organizations funded through the Universities Capital Aid Corporation Act; development corporations, the Ontario Energy Corporation, Ontario Hydro, Ontario Telephone Development Corporation, and the Urban Transportation Development Corporation.

As well as the more formal Environmental Assessment Process, under Sections 30 and 32 of the Environmental Protection Act, a public hearing is required where the 'use, operation, establishment, enlargement or extension of a waste disposal site for the disposal of hauled liquid industrial waste, hazardous waste or any waste greater than the equivalent of domestic waste of 1500 persons. The OMOE director can also require hearings for other waste disposal sites.

Role of the City and the Environmental Protection Office in the Provincial Environmental Assessment Process

(i) Where the City is not the Proponent

Where the City is not the proponent, it is a circulated agency and can comment to the OMOE. Comments on Environmental Assessments were originally submitted to City Council and its Standing Committees jointly by the Commissioners of Planning and Development and Public Works. In recent years, the Medical Officer of Health has also submitted comments in joint reports with the two other commissioners. This arrangement has worked well, and will continue with the Environmental Protection Office being responsible for preparing comments for the consideration of the Medical Officer of Health.

(ii) Where the City is the Proponent

When the City is the proponent, the originating department is almost always the Department of Public Works. In the past, the Commissioner of Planning and Development and the Medical Officer of Health have provided information and advice, as requested, on undertakings such as the proposed refuse-fired steam plant. The proposed EPO will be responsible for

providing information and advice, to the Medical Officer of Health on these matters.

Comparison of the Provincial Environmental Assessment Process and Proposed EPO Review of Selected Development Applications

The proposed role of the EPO in reviewing selected development applications will be to provide a scientifically-based analysis of the potential environmental health concerns and to suggest ways in which the proposal could be changed to mitigate any impacts.

The provincial Environmental Assessment Process considers many different types of development applications, and is not limited to environmental health considerations. It also includes provisions for public hearings and the ultimate decision as to whether to approve an undertaking rests with the Minister of the Environment. Another difference is that provincial Environmental Assessments can take several years to complete, where the EPO's review of selected development applications will take place in the same time-frame as the reviews of other City departments.

ENVIRONMENT CANADA ACTIVITIES RELEVANT TO TORONTO

Environment Canada operates within a mandate defined by Federal legislation including: the Canada Water Act, the Fisheries Act, the Environmental Contaminants Act, the Clean Air Act, and the Government Organization Act. Environment Canada is largely responsible for providing environmental advice to other federal departments, negotiating agreements with the provinces, dealing with environmental problems which transcend provincial and natural boundaries, conducting research programs and ensuring compliance with federal legislation.

Many of the activities of Environment Canada relate to the Toronto waterfront. This is because the federal government is responsible for Great Lakes water quality and advises several Crown agencies which control large portions of the Toronto Waterfront. In recent years, Environment Canada has undertaken the following projects in Toronto:

- Inventoried equipment using PCBs;
- Played an advisory role in the Toronto Area Watershed Management Study, the Municipal-Industrial Strategy for Abatement, and the Lakefill Quality Assurance Program, model Sewer-Use By-law, and studies related to the disinfection of weak effluents;

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- Participated in intergovernmental bodies such as the Junction Triangle Anti-Pollution Committee and the Aquatic Park Task Force;
- Provided technical advice to federal Crown agencies on development matters such as the Keating Channel dredging, the Harbourfront redevelopment, the Railway Lands plan, and the Outer Harbour Marina;
- Carried out air sampling in the Junction Triangle neighbourhood;
- Worked cooperatively with the OMOE on matters such as the Waterfront Remedial Action Plan, review of Provincial environmental assessments and monitoring of the Toronto Waterfront water quality under the Canada-Ontario Agreement;
- Carried out Herring Gull and Canada Goose population programs on the Toronto waterfront.

The City already has a well-defined role in many of the matters which are addressed by Environment Canada in the City of Toronto. This role would not be greatly altered by the establishment of the Environmental Protection Office. There is no duplication between the work of Environment Canada and the City, nor will there be any upon the establishment of the EPO.

FEDERAL ENVIRONMENTAL ASSESSMENT REVIEW PROCESS (EARP)

In 1973, the federal government decided to establish an Environmental Assessment Review Process to cover federal departments and agencies. This was to ensure that federal departments:

- "take environmental matters into account throughout the planning and implementation of new projects, programs and activities;
- "carry out an environmental assessment for all projects which may have adverse effect on the environment before commitments or irrevocable decisions are made; projects which may have significant effects have to be submitted to the Federal Environmental Assessment Review Office for formal review."

The basis of EARP is administrative rather than statutory. Federal departments and agencies participate under the requirements of an Order-in-Council, whereas Crown Corporations are merely invited to participate. The process is geared towards self-initiation. The Ministry or Department initiating the project screens for 'significant environmental effects' and

decides whether it wishes to request the Federal Environmental Assessment Review Office to establish a panel to review the project. The initiating department then prepares an Environmental Impact Statement and submits it to the panel. The panel reviews the report, conducts a public review, and reports its recommendations to the federal Minister of the Environment. However, the role of the panel is purely advisory and the Minister is not bound to implement the panel's recommendations. Again, the role of the City's proposed EPO is purely as a commenting agency unless the undertaking is subject to a required zoning by-law. As in the case of the provincial Environmental Assessment Process, the comments of the City are prepared by the Commissioner of Public Works and the Medical Officer of Health.

ACTIVITIES OF THE ONTARIO MINISTRY OF HEALTH

The Ontario Ministry of Health undertakes many programs related to the health and well-being of the citizens of Ontario. Only programs related to environmental health have been reviewed in this exhibit. All such programs are undertaken by the Public Health Branch, whose role is to provide consulting services on environmental health matters to Ontario's health units including:

- a) Access to, and interpretation of, toxicological data;
- b) Assistance in designing epidemiological studies;
- c) Environmental measurements including assessing human exposure to, and health effects of, chemicals and other substances in the physical environment.

These services are provided only when health units do not have the necessary in-house expertise to be able to deal with complex environmental health matters.

The group providing these services in the Ontario Ministry of Health is relatively small and comprises a medical toxicologist, an epidemiologist and two research assistants, although the group is supplemented with additional staff, if required.

COMPARISON OF ONTARIO MINISTRY OF HEALTH ACTIVITIES AND THE PROPOSED ROLE OF THE EPO

There will be some overlap in the services provided by the Ontario Ministry of Health and the proposed role of the EPO, in the areas of chemical assessments and environmental epidemiology. There will be no duplication in the review of selected development applications, in research on substances less toxic than those currently in use and in the information and education programs proposed for the EPO.

These two possible areas of overlap are not, however, a concern because:

- The Ontario Ministry of Health has jurisdiction over a much larger geographical area than the proposed EPO;
- Overall, the Ontario Ministry of Health has a much larger mandate than the proposed EPO;
- EPO staff will maintain a close cooperative relationship with Ontario Ministry of Health staff providing environmental health programs.

Moreover, Ontario Ministry of Health staff have also experienced an increase in the environmental health workload in recent years, and given the small size of the group, they have found it difficult to keep pace. Discussions at a staff level have indicated that the Ontario Ministry of Health will provide environmental health consulting services to health units when necessary, but when health units have the necessary in-house expertise, such as that which would be provided by the EPO, then the Ministry is able to spend more time and resources on health units without such expertise. In informal discussions Ministry staff have stated that, in their opinion, there is more than enough work for everyone, and that although there may be an overlap in function, in actual programs and services this will not be a problem.

HEALTH AND WELFARE CANADA ACTIVITIES RELEVANT TO TORONTO

Health and Welfare Canada undertakes many programs related to environmental health across Canada. The majority of these are provided by the Environmental Health Directorate, although the Foods Directorate is responsible for setting and enforcing standards for Canadian foods. In general, the Environmental Health Directorate has two functions:

- a) Setting, enforcing and monitoring compliance with environmental health standards, guidelines and objectives

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(e.g., drinking water). This is sometimes done jointly with Environment Canada, and other federal ministries;

- b) Conducting primary toxicological research on the health effects of chemicals.

The proposed role of the EPO does not include either of these functions, so there will not be any duplication of the programs provided by Health and Welfare Canada.

APPENDIX 4

PROPOSED ROLE OF ENVIRONMENTAL PROTECTION OFFICE
IN REVIEWING SELECTED DEVELOPMENT APPLICATIONS

(A) BACKGROUND INFORMATION

A preliminary review of the proposed role of the Environmental Protection Office (EPO) in the City's land use development process led to several conclusions:

- (i) The EPO should not review all development applications, as the vast majority have no potential environmental health effects;
- (ii) The types of applications which do have potential environmental health effects and would be reviewed by the EPO would be identified by a consultative process with staff of the Planning and Development Department, staff of the Committee of Adjustment, and the Environmental Engineering Section of the Department of Public Works;
- (iii) Any review of a development application by the EPO will be conducted concurrently with, and as part of, the existing circulation to other City departments.
- (iv) The Medical Officer of Health will advise the Commissioner of Planning and Development on environmental health matters, as appropriate.

(B) Identifying Areas of Concern

A relatively narrow definition of 'environment' has been used to identify which types of development applications should be reviewed by the EPO. Urban vegetation aspects of development applications are normally addressed by the Planning and Development Department and the Parks and Recreation Department. Similarly, noise and vibration are addressed by the Department of Public Works. Landscape and noise/vibration matters would therefore not be environmental criteria in the selection of types of applications to be reviewed by the EPO. Rather, the EPO would review applications from an 'environmental health' perspective. This would entail considering the effects on human health, as mediated by factors in the physical environment.

This would cover applications where there were potential concerns vis-a-vis soil quality and management, storage and

handling of waste products, air emissions, odours and fumes, wastewater discharges, storage and handling of hazardous materials; and the quality of lake water.

If soil quality and management were a concern, the EPO would recommend testing and an agreement where legally possible to dispose of contaminated soil in a landfill site designed to handle them. The EPO would recommend that on-site storage of hazardous chemicals or waste products be contained in secure facilities. It would be recommended that air emissions and fumes be attenuated at source, with proper pollution control devices so that current air quality standards (Regulation 308) would be met. This will be done in close consultation with Ontario Ministry of the Environment (OMOE) staff. Applications involving lakefilling would be considered in the context of potential effects upon water quality.

(C) Types of Development Applications Where These Concerns are Likely to Arise

Development applications are taken to be applications for Official Plan amendments, Zoning By-law amendments, minor variances, development review agreements, plans of subdivisions, and agreements under Section 36 of the Planning Act or special legislation. Building permit applications would not be reviewed by the EPO because the Chief Building Official is required to issue permits, regardless of environmental concerns, if the application conforms to the Building Code and Zoning By-law standards, as well as any other relevant legislation.

Following meetings with staff of the Planning and Development Department, the OMOE, and the Committee of Adjustment, the following types of applications were identified as having potential environmental health concerns, and therefore being suitable for review by the EPO:

(i) Any Application For a Known Landfill Site or Involving Lakefilling

The Official Plan statements adopted by Land Use Committee (but not approved by City Council as of December, 1986) for the Central Waterfront already propose that a full analysis of environmental and, in particular, water quality impacts be undertaken prior to any lakefilling activities. As the interim EPO is already co-ordinating the City of Toronto's efforts to develop a Remedial Action Plan for the Toronto Waterfront, it would have the necessary information to assess water quality effects of lakefill proposals.

The configuration of the Toronto Waterfront has been dramatically altered by lakefilling over the past century. Applications for the redevelopment of these lands should be forwarded to the EPO for comments to ensure that an adequate soil testing program where legally possible is in place and any contaminated soils are disposed of in an approved manner.

It should be noted that in the Central Waterfront, the jurisdictional powers of the City may be limited in particular instances where federal agencies are the proponents.

Outside the Central Waterfront it will be extremely difficult to identify landfill sites. Further investigative work should be done to verify former waste disposal and other fill sites in the City. A catalogue of such sites could be kept and, when applications are received for redevelopment, apart from building permits they would be reviewed by the EPO. This would ensure proper soil testing and disposal if necessary.

(ii) Development of Lands Formerly Used for
Industrial Purposes and/or Automobile Related Uses

When a change in use is being proposed for lands currently or formerly used for industrial or auto-related purposes, it is proposed that the EPO should be included in the internal circulation for comments. To the extent legally possible, a soils testing and management program will be encouraged. In this context, 'industrial uses' would not include commercial and institutional uses which are incidental to industrial areas. Auto-related uses, such as service stations and auto service and repair shops, usually involve underground fuel tanks which can leak.

(iii) Redevelopment of Sites Adjacent to Major Rail
and Expressway Corridors

Lands immediately adjacent to expressway corridors generally have high lead concentrations in the surface soils. They should therefore be subject to soil testing, and the proper disposal, if deemed necessary and where legally possible. The City's Task Force on the Transportation of Hazardous Goods has not yet submitted its findings and recommendations. Their report is likely to contain recommendations regarding the transportation of potentially toxic materials on major rail corridors and appropriated land uses adjacent to a corridor through which potentially toxic materials are being transported. When the redevelopment of adjacent sites is proposed, the nature of the materials being transported should be considered, where known. This could be done by the EPO.

(iv) Known Contaminated Sites

There are sites in the City of Toronto which are known to have soils containing lead, or PCBs, or have been identified as former waste disposal sites. A catalogue of these sites will be compiled and historical investigative work will be undertaken by EPO staff to identify other sites where chemical handling, storage or disposal may have contaminated the soils. Where a redevelopment or change of use is proposed for one of these sites the Planning and Development Department would include the EPO in the circulation process to ensure the development of an adequate soils management program, where legally possible.

(v) Residential, Park or Public Institutional Uses
Located Adjacent to Industrial Uses or Within
a Zoning District With Permitted Industrial Uses

In some cases, industrial operations may have released pollutants to the air which have contaminated nearby soils. There are also industrial operations which emit fumes or odours or store, handle and dispose of hazardous materials. The placement of residential, park or institutional uses adjacent to such uses or in zone districts where such industrial uses could be permitted as-of-right would require special design features or may create an unhealthy residential/park environment. This would not be the case for many industrial uses, however, it will be desirable for the EPO to review all such development applications.

(vi) Any Application Which would also Require a Provincial or
Federal Environmental Assessment

Major projects proposed by the Province of Ontario, municipalities or their associated agencies/boards are subject to the Environmental Assessment Act and require, unless exempted, the preparation of an Environmental Assessment Report and approval of the undertaking. Projects proposed by the federal government, or its agencies, usually undergo a voluntary environmental assessment review process. In both cases, City Council comments on the environmental assessment document to the appropriate Minister. As well, certain private sector waste disposal applications require environmental assessment hearings. It would be appropriate to include the EPO in this process, so that environmental health concerns are included in the City's comments. It will also be appropriate to include the EPO in zoning applications which also require an environmental assessment so that the City's position is consistent.

- (vii) Any New or Expanded Industrial Use
(including legal non-conforming industrial
uses in non-industrial areas)

The majority of industrial establishments in the City of Toronto are associated with the fashion trade, printing and publishing, food and beverages and other light industries which do not normally pose significant environmental health concerns. In recognition of this, it was initially proposed that a complete listing of types of all new industries requiring environmental health reviews should be prepared. However, the same product can be manufactured by different processes with varying environmental impacts. Therefore, it would be preferable to include the EPO in the preliminary interdepartmental circulation. This will allow the EPO to comment on all new or expanded industrial development applications concurrently with other departments. In 1985, there were only 15 development applications (exclusive of building permit applications) involving new or expanded industries, which would not warrant the production and updating of an industrial process manual.

A second, and more salient reason to circulate all development applications (exclusive of building permit applications) for new or expanded industries to the EPO is to provide a link between the City's development approval process and the provincial Certificate of Approval process. When an industry is proposing to discharge a contaminant into the natural environment they must obtain a Certificate of Approval from the OMOE regarding the emission control systems to be used. Industries requiring zoning or development review approvals from the City often apply and obtain them before going to the OMOE for Certificates of Approval. If the emission controls do not meet provincial standards, the applicant may have to amend the site plans and go back to the City for an amended site plan agreement or a further minor variance from the Committee of Adjustment. To forestall this situation, some municipalities require industries to obtain a provincial Certificate of Approval prior to receiving municipal zoning approvals. However, due to heavy work loads at the OMOE, this could result in a delay in zoning approvals. A preferable alternative route would be to circulate all development applications for new or expanded industries (excepting applications for building permits) to the EPO as well as to other City departments. For applications which involve emissions to the natural environment, the EPO would consult with OMOE staff to attempt to ensure that appropriate guidelines or standards were met and that any changes were made during the preliminary stages rather than after City Council approval had already been obtained. Applications for ancillary commercial or institutional uses in industrial areas

or for variances to the by-law provisions for signs would not be considered to be proposals for new or expanded industry.

(D) Point of Process Where the Environmental Protection Office Would Review Applications

When applications for amendments to the Zoning By-law or Official Plan are received, the Commissioner of Planning and Development recommends that the application be forwarded for comments to the Commissioner of Buildings and Inspections, the Commissioner of Public Works, the Commissioner of Parks and Recreation, the Commissioner of Housing, the City Solicitor and the Metropolitan Toronto Planning Commissioner in his preliminary report. The Medical Officer of Health, and hence the EPO, would simply be added to the circulation list in the instance of the aforementioned types of applications.

Applications for Development Agreements under Section 40 of the Planning Act are automatically circulated to departments such as Building and Inspections, Public Works and Parks and Recreation. In particular circumstances, other departments or agencies such as the Toronto Historical Board or Metro Roads and Traffic may also review and comment upon applications. For the types of applications noted in the previous section, the Planning and Development Department would also circulate the application to the EPO for comments. It is understood that the Zoning and Official Plans Section and Area Planner would not always recognize if an application were on a former industrial, gas station or landfill site.

Committee of Adjustment applications are circulated to the Commissioners of Planning and Development, Building and Inspections and Public Works for comments. Where an application impinges on the jurisdiction of another agency or department, such as the Historical Board, they also have an opportunity to comment.

The Secretary-Treasurer of the Committee of Adjustment has indicated that it will be possible to circulate all Committee of Adjustment applications to the EPO. This would mean that EPO staff, rather than Committee of Adjustment staff, will sort through the applications and select those appropriate for review by the EPO.

(E) Number of Development Applications to be Circulated to the Environmental Protection Office

The number of applications submitted in 1985 for Official Plan Amendments, Zoning By-law amendments, site plan agreements and minor variances has been reviewed. If the types of applications noted in this report had been circulated to the

EPO, a total of 51 applications out of over 2000 would have been forwarded for review according to the following breakdown:

Official Plan and Rezoning Applications:	9
Development Review Applications:	19
Committee of Adjustment	<u>23</u>
Total	51

Since only 2 - 3% of all applications would be reviewed by the EPO, and there would be no concerns with many industrial applications, the review of development applications would be a very minor component of the proposed workplan for the EPO. The development assessment work should therefore be combined with other research work such as cataloguing of contaminated soil sites and former toxic industrial sites and other necessary research tasks.

(F) Implementation

(i) Soils Management

Where the previous industrial use of a site warrants, a soils management program may be recommended by the EPO to ensure testing and proper disposal of contaminated soils. The proponent would agree to report the results of the soil analysis to the Medical Officer of Health and the OMOE, and to dispose of any contaminated soils in accordance with existing provincial and/or municipal guidelines.

As soil testing for contaminants is not covered under Section 34 or 40 of the Planning Act, a requirement for soil testing cannot be included in the text of a Zoning By-law or Section 40 development review agreement. Where soil testing and analysis is recommended, it would have to be the subject of a collateral agreement between the City and the proponent. The City Solicitor has frequently advised as to the difficulty of enforcing a collateral agreement. Where Official Plan/Zoning By-law amendments are being applied for, the collateral agreement, would be put forward in the final recommendations report as a City request. Where the proponent agrees, a collateral agreement could be prepared concurrently with the draft by-laws. The introduction of the bills in City Council would take place only on implementation of the collateral agreement.

A new section of the City's Official Plan dealing with environmental matters, is currently under circulation in the Planning and Development Department. One of the proposed Official Plan statements cites that City Council may request

soil testing on redevelopment/development sites which may likely contain contaminated soils.

Where the EPO is recommending soil tests be conducted on a site which is the subject of a Committee of Adjustment application, the Medical Officer of Health could simply request the Committee to grant any approval conditional upon agreement to analyse and report on soil samples.

When an application for a site where soil testing was desirable needed only a Section 40 Development Agreement, there would be no statutory means of requiring soil testing, since Section 40 does not cover disposal of excavated material and there is no provincial legislation dealing with the testing of potentially contaminated soils. In this instance, the applicant could be asked to submit soil analyses voluntarily. In the short run, the City can ask the OMOE to name the site as a "Designated Control Area" under the Lakefill Quality Assurance Program, to attempt to prevent potentially contaminated fill from being dumped on the Eastern Headland.

(ii) Emission Controls

Under the Environmental Protection Act any new or expanded facility that emits or discharges a contaminant into any part of the natural environment must obtain a Certificate of Approval from the OMOE. Where an application for an Official Plan Amendment, Rezoning or Section 40 Agreement reaches the EPO for review and a Certificate of Approval would be required, the EPO will consult with, and solicit formal comments from, OMOE staff before commenting, to ensure that the physical facilities proposed will be environmentally sound and eligible for a certificate. The requisite equipment, as part of the physical structure (e.g. electrostatic precipitators or scrubbers) would be included or noted on the plans for approval, for the benefit of the circulation to the OMOE.

When a Committee of Adjustment application required OMOE approval because of emissions, the same consultation between the EPO and the OMOE would be required, prior to the EPO submitting comments.

When an application would require physical attenuation measures that would necessitate technical discussions between the EPO, the OMOE and the proponent, the short response time of Committee of Adjustment applications could be problematic. In some instances, Committee of Adjustment approval might be recommended to be conditional upon obtaining a Certificate of

Approval, where the condition reasonably relates to the variances.

(iii) Storage and Handling of Potentially Hazardous Materials

When an application for an Official Plan Amendment/Zoning By-law amendment or Development Review involves the storage or handling of potentially hazardous materials, questions of use can be dealt with directly in the Official Plan or zoning amendment and the question of waste storage can be dealt with in a development review application under Section 40 of the Planning Act. The Committee of Adjustment has the ability to approve or refuse any application, including those dealing with the use/storage of potentially hazardous material.

(iv) Lakefill and Water Quality

Under the Central Waterfront Official Plan statements, adopted by Land Use Committee (but not approved by City Council as of December, 1986), the creation of new areas of land would require an Official Plan and Zoning By-law amendment. City Council must consider 'an appropriate written analysis of the environmental impact'. The role of the EPO would be to assess the effects on lake water quality and advise the Medical Officer of Health in full accordingly. The EPO will also ensure the proposed physical arrangements will not lead to unacceptable water quality impacts.

Appendix 4 has been prepared in consultation with the City Solicitor.

Appendix 5

PROPOSED ROLE OF THE ENVIRONMENTAL PROTECTION OFFICE (EPO)
IN ENVIRONMENTAL INFORMATION AND EDUCATION PROGRAMS

1. Background Information

In recent years, concerns about the environment have become increasingly linked to human health. At the same time, many individuals and groups have expressed a desire to become better informed and to participate in the solutions to environmental problems, both at a personal and a societal level. This desire was recognized by the City departments and the groups, agencies and individuals that were consulted during the internal and external needs assessment processes for the EPO. As a result of these internal and external discussions, the following three principles emerged as a basis for the proposed role of the EPO in environmental information and education programs:

- a) The public has a right to gain easy access to scientifically-accurate, readily understandable information on environmental matters;
- b) If the public has a better understanding of environmental matters, they will be better able to participate in developing solutions to problems;
- c) Environmental problems will only be successfully solved when all sectors of society participate in their solution.

2. Method

The proposed role of the EPO in environmental information and education programs was formulated following a review of environmental information and education programs currently undertaken by City departments and the Metropolitan Toronto Works Department. This review assessed what procedures are in place to provide information to the public and other client groups on each department's environmental programs. It also assessed the extent to which the public and other client groups have direct access to departments conducting environmental programs.

Using the review as a base, consultations were undertaken with each City department administering environmental programs and the Metropolitan Toronto Works Department, to determine what, if any, additional education programs are necessary. This was followed by external consultations with representatives of business and industry, labour unions, public interest and

environmental groups, academic institutions involved with environmental teaching and research activities and elected and staff officials of the federal and provincial governments. Comments and suggestions received during these two consultation processes have formed the basis for the proposed role of the EPO in environmental information programs.

3. Results of Internal Consultation

Environmental information services are provided by all City departments that administer environmental programs and by the Metropolitan Toronto Works Department. Due to the operational nature of many of these departments, environmental information services are not always given a high priority and tend to be provided by staff with other commitments. In most cases, the lack of a strategic approach to these services makes it difficult to evaluate their effectiveness in delivering a specific program objective.

Most departments have identified, and are serving the needs of, their immediate clients, however, due to time and budget constraints they have not been able to identify broader audiences for consultation and other educational programs. This is particularly true in the case of public interest groups, labour unions and other specific sectors.

A high volume of public inquiries, written, telephone and in-person, are handled efficiently by City departments and the Metropolitan Toronto Works Department. However, few statistics are maintained on the type and volume of inquiries received. Media relations are conducted in response to inquiries from journalists and are not usually initiated by staff. Surveys of public opinion and media monitoring are conducted sporadically.

The results of the internal consultation are shown in Table 1..

4. Results of External Consultation

The environmental and public interest groups consulted expressed difficulty in handling the volume of information requests they receive. In particular, they spend a lot of time explaining the jurisdictional responsibilities of different government agencies and departments, and talking about the relationships between the environment and human health. It is therefore difficult for them to find time to prepare and distribute environmental education materials. These groups expressed the strong desire for the EPO to respond to information requests and produce and distribute environmental educational materials.

Representatives of business and industry were of the opinion that much of the environmental information currently available to the public was inaccurate and heavily biased. They expressed concern about sensational media stories that alarm the public unnecessarily, and do not present the facts. The organizations consulted were keen for the EPO to produce scientifically-accurate information and education materials that would redress the balance and be as objective as possible.

The labour union representatives consulted were of the opinion that occupational health information is either not available or is not easily accessible to the people that need it. They were also of the opinion that interpretive material is needed that goes further than a brochure, but is less detailed than a scientific report. They would support the EPO's proposed role in environmental information and education programs.

Academic institutions and government officials consulted would also support the proposed role for the EPO in this area.

5. Proposed Objectives for EPO's Role in Environmental Information Programs

The proposed objectives for the EPO's role in environmental information programs are:

- a) To increase the understanding of environmental protection matters in the City of Toronto; and,
- b) To involve the public in the resolution of environmental problems.

6. Client Groups

In addition to the general public, the following client groups have been identified as target audiences for the EPO's proposed environmental information programs (not in rank order):

- a) Community groups;
- b) Environmental and public interest groups;
- c) Business and industry;
- d) Labour;
- e) Media;
- f) Academics and students.

7. Strategic Approach

Environmental information and education services will be provided by the proposed EPO in three ways:

a) Assistance with existing programs

The EPO will assist other City departments and the Metropolitan Toronto Works Department with existing environmental information and education programs. This assistance will focus on strengthening the environmental health component of existing services, and will concentrate on the following areas:

1. Identification of environmental, public interest and community groups to broaden the audience for existing information and educational programs;
2. Assistance with public consultation activities such as public meetings, as well as informal sessions with appropriate individuals to discuss issues before they become prominent;
3. Assistance with research and the preparation of information and educational materials on environmental matters;
4. Addition of an environmental component to educational activities and distribution systems already in place, such as the provision of information with Toronto's water bills.

b) Coordination and facilitation of environmental information and education programs

In some cases, several departments are providing information and education programs on the same subject. In addition, some departments would like to provide services on the same environmental matters as are provided by other departments. For example, the Department of Public Health provides information on cockroach control, which could also be used by the Housing Department. Other areas involving more than one department include pesticide use, indoor air quality and identifying and reducing the use of potentially hazardous materials in the workplace.

The proposed EPO will play an important role in coordinating and facilitating these services, so that different departments are aware of what information and educational materials are already available. This will

minimize duplication and will ensure that all materials produced are scientifically-accurate and contain up-to-date information on environmental health.

c) Environmental Protection Office

Environmental information and education programs will also be initiated by the Environmental Protection Office. The primary function of these services will be to provide scientifically-accurate, readily-understandable materials on environmental health matters. These materials will be credible and authoritative and will present and discuss information as objectively as possible. The EPO will also act as a clearing house for individuals or groups seeking information and/or advice on environmental protection matters. This will be done by collecting and making available existing high quality information and education materials produced by other individuals, groups and agencies.

Another environmental information function for the proposed EPO will be to provide liaison services to community groups to facilitate their access to information and officials at all levels of government. This will be done through the Department of Public Health's four Health Areas, which are already responsible for the majority of community liaison work undertaken by the Department. This work will involve providing information around such subjects as:

- environmental legislation
- responsible jurisdictions
- how to research a subject
- what materials are already available
- who are the appropriate individuals to contact, and
- arranging public meetings.

8. Program Priorities

The priorities for the proposed environmental information programs are based on needs identified in both the internal and external consultation processes and are intended to apply to all three services described in section 7 above. The program priorities listed below are not in rank order.

- a) Educational materials on the safe use of, and alternatives to, pesticides used in Toronto;
- b) Educational materials on Toronto's drinking water;

- c) Education materials on chemical use in the home and the relationship to allergic reactions;
- d) Educational materials on the environmental health of workers in office buildings;
- e) Other occupational health materials;
- f) Educational materials on the process of risk assessment;
- g) A "road map" showing the government agencies responsible for different environmental matters.

When programs are developed around these priorities the following considerations will be taken into account:

1. Audiences will be clearly defined, with particular attention to small business and industry;
2. All programs will have mechanisms for consultation with the target audience to assure their relevance;
3. All programs will be designed with an evaluation component, so that their effectiveness can be determined, and appropriate adjustments made;
4. When appropriate, programs will be linked with those of other departments, to ensure that duplication is minimized and that programs reach diverse target audiences effectively;
5. Inquiries from the public, whether written, verbal or in-person, will be handled efficiently with statistics maintained to determine the issue and volume of inquiries received;
6. Media relations will be conducted on both an informal and formal basis utilizing background briefings to make journalists familiar with the complexity of environmental issues;
7. Attention will be paid to the needs of citizens from varying ethnic backgrounds and those with below average reading ability in the production of any educational materials;
8. Public opinion surveys, as well as media monitoring, will be conducted to identify trends in public opinion on environmental issues.

9. Summary

This exhibit has described the proposed role of the EPO in environmental information programs. It outlines the results of the internal and external consultation processes that were intended to assess the current status of environmental information services in the City of Toronto and in the Metropolitan Toronto Works Department, and to identify future directions. Based on these results, a role for the EPO is proposed that is based on cooperative work with other City departments, and some projects that will be the sole responsibility of the EPO.

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Environmental Information and Education Review
PROGRAM STATISTICS FOR ALL INFORMATION AND EDUCATION SERVICES

Department	Jobs	Salaries	Budgets	Evaluation
Buildings and Inspections	1 training coordinator 3 inquiries clerks	\$29,915 coordinator \$15,000 clerical	\$55,372 - training	all educational programs have evaluation component
Property	none	none	none	none
Fire	one full-time position equivalent	\$40,000	no specific budget	operational effectiveness
Housing	none	none	none	none
Metro Works	0.75 position for plant tours	none defined	none	none
Parks and Recreation	1 graphic designer 1 coordinator plus students	none defined	none defined	none
Planning and Development	1 full-time position equivalent	\$43,000	none	none
Public Health	2 health promoters 2 health educators 1 in promotion and advocacy	\$148,241 \$229,924	none in environmental services \$800,000 - promotion and advocacy (some grant funds)	formal evaluation part of promotion and advocacy section none in place in other sectors
Public Works	none	none	none	none

* Departments conduct educational work as part of their ongoing program without identifying specific jobs and budgets.

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Environmental Information and Education ReviewCLIENT GROUPS

Department	Staff	Business	Industry	Labour	Other Governments	Interest Groups	Academe	Media	Public	Other
Buildings and Inspections	x	engineers and architects	developers and builders		municipal and provincial		x			legal community municipal and provincial politicians
Property	x	x	developers					advertising re Weed Control By-law	weed control	other City departments (in capacity as landlord)
Fire	x		x						x	
Housing		consultants (architects and subcontractors)			CMHC provincial Ministries of Housing and Environment	project tenants and rate-payers groups		x		other City departments
Metro Works	x	potential polluters	x						x	
Parks and Recreation	x	x	x			x	x	x	x	politicians other City departments

x indicates yes

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Environmental Information and Education ReviewCLIENT GROUPS (cont'd)

Department	Staff	Business	Industry	Labour	Other Governments	Interest Groups	Academe	Media	Public	Other
Planning and Development	x		x		provincial and municipal		x		x	
Public Health	x	retail and restaurant owners	x	occu- pational health	provincial and federal	community- based	x	x	x	
Public Works	x	consulting firms			Health Buildings Parks Planning			x	x	

x indicates yes

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Environmental Information and Education ReviewINFORMATION DISSEMINATION

Department	Inquiries Written	In person	Telephone	Formal media relations	Informal media relations	Print Material	Audio-visual	Mailing Lists
Buildings and Inspections	13,737 (six month period)	2,312. (same)	26,312 (same)	advertising	responses to inquiries	range	av for staff training av on termates	yes
Property	Weed Con -ol By-law	air quality in buildings and smoking	1137 in 1985	advertising only	none	none	none	none
Fire	few	few	high from public and media	infrequently	most are reactive	internal bulletins	range of av material used in training	City and Metro De- partments only
Housing	none	tenants re noise or other env'tl issues	same	press releases to announce pro- ject openings	none	handbook and factsheet	none	none
Metro Works	follow media coverage	drop-ins (water and sewage treatment plants)		none	daily inquiries received	kits and fact- sheets	slide shows on water supply, sewage and garbage collection	lists of potential polluters ranked high, medium and low

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Environmental Information and Education ReviewINFORMATION DISSEMINATION (cont'd)

Department	Inquiries Written	In person	Telephone	Formal media relations	Informal media relations	Print Material	Audio-visual	Mailing Lists
Parks and Recreation	letters on spray program		spray stopping scoop water & soil	press con- ferences, briefings and releases	ongoing re- sponses to inquiries	range	range	Maintained by category and issue
Planning and Development	medium	medium	medium	none	responses to inquiries only	factsheets reports, books, quarterly magazine	slide shows and displays	Maintained by category
Public Health	high (City and provincial politicians)	few	high (politicians public and media)	press con- ferences and releases	briefings held fre- quently numerous inquiries	reports range of print materials and posters	slide shows, videos, displays	Promotion and advocacy maintain mailing lists by category
Public Works	water and noise problems	none	water and noise problems	press releases issued sporadically	mostly responsive to media	Noise By-law only	Noise By-law only	Maintain mailing list - refuse- red steer plant

Environmental Information and Education ReviewINFORMATION GATHERING

Departments	Surveys	Media Monitoring	Inquiries Monitoring	Informal Consultation	Formal Consultation
Buildings (professionals and Inspections	public perception of depart- ment survey	none	ongoing	ongoing	yes development particularly)
Property	question- naires to city employees	Weed Control By-law	yes	when clients have complaints	reports to City Services Committee
Fire	none	Informal	none	other departments, Gas & Hydro	other fire depts. academics, interest groups
Housing	specific surveys for tenants	landlord/tenant issues	none	two officials deal with tenant problems	none
Metro Works		Informal	none		recycling committee
Parks and Recreation	studies conducted routinely	newspapers only	none	yes	yes

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Environmental Information and Education ReviewINFORMATION GATHERING (cont'd)

Departments	Surveys	Media Monitoring	Inquiries Monitoring	Informal Consultation	Formal Consultation
Planning and Development	surveys conducted on issues	newspapers only	none	yes	yes
Public Health	range of polls and surveys carried out	formal monitoring of newspapers informal monitoring of radio & TV	no statistics kept except inquiries on sexually-transmitted diseases	ongoing	meetings, boards, conferences
Public Works	specific surveys around noise some re-cycling surveys	newspapers only	yes (noise and flooding)	none	public meetings on refuse-fired steam plant TRAC

DEPARTMENT OF PUBLIC HEALTH
CENTRAL RESOURCES
ENVIRONMENTAL PROTECTION OFFICE

PLAN OF ORGANIZATION
AND
PERMANENT ESTABLISHMENT

